

Sister Elizabeth Kenny Foundation

2400 FOSHAY TOWER
MINNEAPOLIS 2, MINNESOTA

September 10, 1949

Dr. Hulda Thelander
384 Post Street
San Francisco, California

My dear Doctor Thelander:

During the past year, the medical direction of the work of the Sister Elizabeth Kenny Foundation has been placed entirely in the hands of the members of the medical profession. Important new medical affiliations have been made, and recognition of the value of the Kenny treatment as a weapon in the battle against polio has become more general. The medical staff of the Kenny Foundation feels that it has something of definite merit to offer physicians interested in polio.

To accomplish an interchange of vital information, the Kenny Foundation is sponsoring a polio medical seminar in Minneapolis, on October 3, 4 and 5. We sincerely hope that you will find it possible to attend this conference as our guest. Eminent physiatrists, orthopedists and pediatricians from all parts of the nation are being invited.

We have asked Dr. Claus W. Jungeblut, of Columbia University, to explain the development of research he has been conducting into the origin of the disease. Representatives of the University of Minnesota Medical School have also been asked to speak. However, it is anticipated that the main emphasis of the conference will be placed on actual demonstrations of the Kenny treatment to be followed by round table discussions in which each person who desires to be heard will be afforded an opportunity to present his views. The physical therapy phase of the demonstrations will be under the direction of Dr. Miland E. Knapp, and the orthopedic aspects will be under the direction of Dr. Wallace H. Cole.

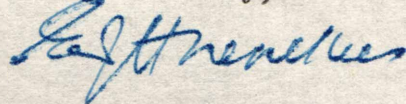
While the conference is being sponsored by the Kenny Foundation, we wish to make it clear that your presence at the conference will in no way be construed as an endorsement or acceptance by you of any aspect of the Kenny work. You will be given an opportunity to observe the approach of the medical staff of Elizabeth Kenny Institute to the treatment techniques introduced by Sister Kenny. Demonstrations will be conducted by them on patients at the Minneapolis Institute, with particular attention to the possibility of avoiding after-care deformities, but evaluation of the work presented will be left entirely to your own judgment.

September 10, 1949

It is our earnest hope that you will find it possible to attend a portion or all of the sessions of this conference. Meetings will be held in the Nicollet Hotel and at Elizabeth Kenny Institute. Reservations will be made in accordance with your instructions and the Kenn Foundation will pay the expenses of those who desire it.

Please advise us at your early convenience whether you will be able to participate in this seminar and what your wishes are regarding arrival time and reservations.

Yours sincerely,

A handwritten signature in blue ink, appearing to read "E. J. Huenekens".

E. J. Huenekens, M. D.
Medical Director

EJH/kb

EVIDENCE PRESENTED TO HIS EXCELLENCY
LUTHER YOUNGDAHL, GOVERNOR OF THE STATE OF MINNESOTA,
AND TO DOCTOR WALLACE COLE,
PROFESSOR OF ORTHOPEDIC SURGERY,
UNIVERSITY OF MINNESOTA MEDICAL SCHOOL
COVERING THE END RESULTS OF TEN YEARS' RESEARCH
CONCERNING THE DISEASE POLIOMYELITIS

April, 1950

My first encounter with the disease known as poliomyelitis was forty years ago. At that time my clinical observations led me to believe that that part of the body accepted as normal was not normal at all, but badly disturbed by the disease, and required skillful nursing care and treatment, and for this purpose the paramount principle of orthodox treatment, that is immobilization, had to be abandoned.

Twenty-eight years later it was agreed by Doctors Foster and Price, orthopedic surgeons of Melbourne, Australia, that my clinical observations required careful consideration. The matter was put before the Board of Directors of the Brisbane and South Coast Hospitals and I was given the privilege of treating patients suffering from this disease from the acute stage in order that I may employ nursing care and treatment to what I thought was the affected areas, and abandon immobilization. It was agreed that the patients made brilliant recoveries. It was further agreed that for the first time in history a treatment had been evolved for this disease in the acute stage.

Having proven this, it was necessary to institute research concerning the cause of this disturbance and other phenomena concerning this disease. Therefore, ten years ago arrangements were made for me to visit the United States of America as an official visitor.

Two letters of introduction had preceded me; one signed by the Premier of the State of Queensland, the Honorable W. Forgan Smith, and addressed to Mr. Basil O'Connor, President of the National Foundation for Infantile Paralysis, and the other signed by six prominent medical men in the State of Queensland and addressed to Dr. Melvin Henderson, of the Mayo Clinic.

The letter bearing the signature of the Premier, and addressed to Mr. Basil O'Connor, contained the following statement:

"Sister Kenny's mission to the United States is to obtain scientific assistance to complete her research. She seeks no personal gain. She had neither sought nor accepted any monetary reward from the Government or from the patients.

"Early cases which have occurred since she has had access to patients in the hospitals have been treated in the acute stage by her system with outstanding results. She has also had outstanding results in her treatment of cases in the convalescent stage.

"My Government has been much impressed with the results of the Kenny treatment, particularly with the success of the system in the treatment of the disease in the acute stage. This success opens up the prospect that much greater improvement can be made in treating the disease than has previously been accomplished.

"Miss Kenny has, in the opinion of the Queensland Government and that of many medical men, made a notable contribution to the cause of humanity.

"Accordingly, I commend Miss Kenny to the good offices of the National Foundation for Infantile Paralysis."

My first objective was to meet with Mr. O'Connor, who in association with Doctor Gudakunst, informed me that the National Foundation for Infantile Paralysis had no desire to make any investigation, and that it would be wise for me to return to Australia. On receipt of this statement, I thought it would be wiser not to proceed any further with the matter, but to return to Australia.

However, Mr. Peter Cusack requested me to see Mr. Carter, in Chicago; and I also had a letter from Professor Wilkinson, addressed to the late Dr. Richard Ransom. During my stay in Chicago I received a very cordial invitation (in response to the request of the six medical men) to visit the Mayo Clinic. I was very pleased to visit this famous medical center and was courteously and cordially received by Doctors Henderson and Krusen, who in turn introduced me to Dr. Wallace Cole and Dr. George Williamson, of St. Paul, giving them the Australian message.

The Twin Cities of Minneapolis and St. Paul had, in the year previous, suffered from an epidemic of the disease infantile paralysis; and more than three-fourths of the patients were still in hospitals under treatment. To be brief, I was shown several patients who were receiving the best modern treatment for this disease and I was informed that they were "getting no better fast" and that deformities were developing rapidly. In a few cases I corrected the deformities

and restored muscle function to muscles that were supposedly paralyzed. This aroused the interest of Doctors Cole and Williamson, of the City of St. Paul. I was then introduced to Doctors Pohl and Knapp, of the City of Minneapolis, and was again presented with patients who were apparently helpless cripples and had received treatment in the best treatment centers in the United States of America, including Georgia Warm Springs.

At the first session of the presentation of these patients, I was able to demonstrate that by abandoning the paramount principle of orthodox treatment and substituting treatment for the newer theory, it was possible to correct deformities and restore function in certain muscle groups, and after a period of time convert these apparently hopeless cripples to ordinary useful citizens. Thus it will be seen that at the very onset the reformed treatment had proven its value and that this investigation was carried out under the auspices of members of the medical profession, at my own expense, subsidized by financial aid from my Government.

At this stage it was agreed by the supervising doctors that an entirely new concept concerning the symptoms and conditions presenting themselves in this disease had been presented.

Dr. John Pohl then introduced me to the Public Welfare Board of the City of Minneapolis, who in turn agreed to provide funds and accommodation for patients whereby the treatment evolved by me could be demonstrated. However, as explained in the letter of the Honorable W. Forgan Smith, my mission to the United States was to obtain scientific assistance to complete my research. Dr. Wallace Cole informed me that this research could not be completed within a period of ten years. Research referred to, to be complete, must embrace the following procedures:

1. Scientific research to reveal the cause of the disturbance in the peripheral structures discovered by me, in that part of the body which is accepted as normal throughout the medical world.

2. The evaluation of the treatment evolved by me for the symptoms and conditions presenting themselves in this disease, which were previously unknown; in comparison with other types of treatment for the disease as it was known.

3. The department of medicine under whose control the patient should be placed from the day of the onset to the maximum amount of recovery.

4. The type of service most satisfactory to the medical man in control of the treatment of the patient suffering from the disease poliomyelitis in order to produce the best end results.

5. Was it possible to transmit my knowledge to Technicians who, in turn, could with confidence and ability demonstrate the newer theory and its treatment to the medical world.

The ten years have expired, and the data concerning this research has been presented to Dr. Wallace Cole and to His Excellency, Governor Luther Youngdahl, Governor of the State of Minnesota, and contains the result of an investigation concerning these five objectives.

Concerning Objective #1 - Scientific investigation in reference to theory.

Scientific investigations for the purpose of this procedure were conducted at three of the oldest and most outstanding research institutes in the world, namely:

Columbia University, New York, New York
Cajal Institute, Madrid, Spain
Neurological Institute, Brussels, Belgium

It was agreed and proven at each of these institutes that my clinical observations were correct, thus removing the disease from the category of a local lesion to that of a systemic lesion. It was further stated that:

"...no intelligent approach to the control of poliomyelitis is thinkable without a clear understanding of these fundamental phenomena."

Concerning Objective #2 - Investigation concerning end results of treatment.

For this purpose it was necessary to place Kenny Technicians in different parts of the world to carry out that treatment under medical observation,

allowing the medical observers to present their findings. The places chosen were:

Children's Hospital, Winnipeg, Canada
Riverside County Hospital, Arlington, California
Oakland County Contagious Hospital, Pontiac, Michigan
Auckland General Hospital, Auckland, New Zealand
Neurological Institute, Brussels, Belgium
Queen Mary's Hospital, Carshalton, England
Yakima, Washington

It was agreed by the medical observers from these different parts of the world that the end results for the newer theory were many times better than those obtained by any other method for any other theory.

Concerning Objective # 3 - The special department of medicine under whose supervision the patient must be placed.

It was agreed that I had established the fact that the lesions dealt with in the chronic stage by orthopedic surgery made their appearance in the initial stage. Therefore, it was the obligation of that particular department of medicine, whose duty it is to keep the body straight, to attend to this particular matter right from the very beginning, thus avoiding much of the deformity and the necessity for surgery; and, if surgery was imperative the condition would be very much more conducive to better end results. Therefore the orthopedic surgeon should have close association from the onset. Deformities are caused through invasion of virus in peripheral structures.

Concerning Objective # 4 - Concerning the service most satisfactory to the medical observer and the patient.

It was agreed at a small meeting of orthopedic surgeons that a fully trained Kenny Technician, with background of professional nursing, obtained much better end results than a physiotherapist. It was further agreed at the Riverside Hospital that the work of the fully trained Kenny Technician excelled any other procedure carried out at that institution by physiotherapy. Concerning this matter Kenny Technicians trained in the science of dermo-neuro-muscular therapy, can care for the patient from the day of the onset and attend to throat suctioning, intravenous feeding, different types of enemas, observe the approach of

cyanosis, quickly detect any change in pulse and respiration, intelligently use a respirator, and soothe the last hours of a dying patient to the entire satisfaction of the medical supervisor; whereas it is admitted by physiotherapists that they experience a great fear at the very thought of these procedures. It is agreed by all medical supervisors that the whole future of the patient depends upon skillful care and treatment in the acute stage.

Concerning Objective # 5 - Concerning transmission of this knowledge and the demonstration of its application.

The fully trained Kenny Technicians could with confidence and ability demonstrate both the theory and practice to the satisfaction of outstanding medical men in the following highly commended institutes:

General Hospital, Auckland, New Zealand
Neurological Institute, Brussels, Belgium
Queen Mary's Hospital, Carshalton, England
Children's Hospital, Prague, Czechoslovakia
Children's Hospital, Winnipeg, Canada
St. Elizabeth's Hospital, Yakima, Washington
Riverside Hospital, Arlington, California
Buffalo, New York.

The importance of this procedure can not be overestimated. This fact is emphasized by the study of the most recent literature on the subject of this disease. I am now referring to a scientific exhibit which was presented in the Journal of Post Graduate Medicine, July, 1949. In a paper, presented by the National Foundation for Infantile Paralysis, the fact is disclosed that unfortunately all practitioners outside of those working directly in association with a fully trained Kenny Technician are still under the impression that the shortened area is strong and normal, despite the fact that it is painful and that the opposing part is suffering from the condition known as spasm. Reference is made in this article to flaccid paralysis following the condition of spasm. This statement is altogether erroneous, and no intelligent approach to treatment could be given in reference to this theory.

Also, in the Journal of Bone and Joint Surgery, January, 1950, a further erroneous statement appears concerning this condition of shortening.

This paper was published by Doctor Lenhard, of Baltimore, Maryland, in association with Mr. & Mrs. Kendall, wherein it is stated that the muscles of the back and posterior lower limbs sometimes are affected by this shortening; whereas, as a matter of fact, any part of the peripheral structures invaded by the disease presents this abnormal condition. It is agreed by the scientists that "...no intelligent approach to the control of poliomyelitis is thinkable without a clear understanding of these fundamental phenomena."

Preventive Vaccine

It will be gathered from the contents of this paper that quite an extensive and satisfactory research program has been carried out during this last ten years. This program was organized in such a manner to defy any criticism of biased activity.

The next most important step is the production of a preventive vaccine and, for this purpose, the Kenny Foundation has affiliated itself with the most outstanding virus and serum laboratories in the world today, both in the United States of America and abroad, and where possible has established treatment centers in association with the investigation in order that the scientists may be fully equipped with all knowledge concerning the activities of the properties they are endeavoring to combat.

This association applies to all departments of research and treatment, and was further emphasized at the International Conference, held at the Waldorf-Astoria July, 1948. A question was asked by a delegate from another country concerning spinal deformity. The question was:

"Could any member of the panel explain the cause of the materialization of spinal deformity?"

No answer was given and the question was repeated to the delegates, with the same result. However, several members of the American Medical Association were aware of the fact that spinal deformities rarely occurred in the cases treated

under my supervision, and asked me would I explain to the delegates present my theory concerning this matter.

A special request was sent to the Moderator of the afternoon, Doctor Bennett of Warm Springs, but no doubt Doctor Bennett was aware of the fact that it was the policy of the National Foundation for Infantile Paralysis at this conference not to present anything that did not materialize from a grantee of this said Foundation, therefore, the question was out of order. I was not asked to present my theory.

It will be remembered that it is recorded by Doctors Crego and McCarroll, of Shriner's Hospital, St. Louis, in the Journal of Bone and Joint Surgery, October, 1941, when treatment is given for the accepted theory, fifty per cent of the cases with trunk involvement developed spinal deformities during treatment.

It is recorded in the Journal of Post Graduate Medicine, February, 1950, Volume VII, No. 2, page 105, that:

"The Kenny method keeps deformities to a minimum, utilizes to a maximum the remaining muscle power, and almost eliminates curvature of the spine, which sometimes follows apparent recovery."

This statement was made by the head of the Department of Orthopedics of the University of Minnesota, Medical School, Dr. Wallace Cole.

The evidence presented by Doctors McCarroll and Crego, after their four years' observation, and that of Doctor Cole, after his ten years' observation, is a striking contrast, and emphasizes the importance of the discovery of the fact that this disease is a systemic disease. The dissemination of this knowledge throughout the world is of paramount importance for, as already stated, the scientists have unhesitatingly said:

"....no intelligent approach to the control of poliomyelitis is thinkable without a clear understanding of these fundamental phenomena."

E. Brunny

Columbia University
College of Physicians and Surgeons

630 WEST 168TH STREET, NEW YORK 32, N. Y.

DEPARTMENT OF BACTERIOLOGY

December 21, 49.

Miss Elizabeth Kenny,
Elizabeth Kenny Institute,
1800 Chicago Avenue,
Minneapolis, Minn.

My dear Miss Kenny:

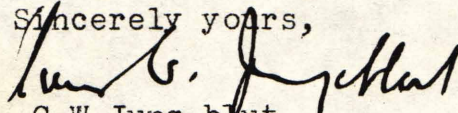
I do not like to let the holiday season pass without sending you a word of sincere appreciation of your friendship and continued interest in our work. Needless to say, this work would not have been possible without the generous support received through you from the Kenny Foundation. For this I am deeply grateful to you.

As I look over our activities during the past year, I feel both happy and proud that we were fortunate enough to make a number of scientific contributions which provide direct evidence in favor of your concept of the peripheral origin of poliomyelitis. Among these I should mention particularly our success in isolating the virus from the heart of two fatal cases and from the paralyzed skeletal muscle of one non-fatal case during the acute stage of the disease. I firmly believe that no intelligent approach to the control of poliomyelitis is thinkable without a clear understanding of these fundamental phenomena.

I should also add a note of appreciation of the cordial personal relationships which have marked my contacts with the group of colleagues in your organization. It has been a pleasure to work with them and I am looking forward to a further extension and consolidation of our common efforts in the time to come.

Merry Christmas and a Happy New Year to you.

Sincerely yours,


C.W. Jung blut

MASARYKOVY DOMOVY V PRAZE-KRČI

Státní odborné, léčebné a ošetrovací ústavy
Dětská léčebna - Dětské nemocniční oddělení

Vedoucí lékař: Prof. F. Blažek D.m.

V Praze 4 the of March 1950.

C. j. _____

Dear Sister Kenny.

Through the assistance of your able representative Miss D.E.Curtis, K T we have had the opportunity of studying your Concept and Treatment.

We admire the courage and tenacity with which you held to and defended your beliefs so that they were preserved to be transmitted to us. We are grateful that you have put in our hands this splendid new weapon to combat the ravages of this disease.

On your next visit we hope to show you our successes obtained from using it.

With our best respects

- | | | |
|---------------------|------------------------|------------------------|
| 1. <i>Stanley</i> | 15. <i>W. H. H. H.</i> | 29. <i>Chad</i> |
| 2. <i>H. H. H.</i> | 16. <i>W. H. H. H.</i> | 30. <i>J. J. J. J.</i> |
| 3. <i>H. H. H.</i> | 17. <i>W. H. H. H.</i> | 31. <i>J. J. J. J.</i> |
| 4. <i>H. H. H.</i> | 18. <i>W. H. H. H.</i> | 32. <i>J. J. J. J.</i> |
| 5. <i>H. H. H.</i> | 19. <i>W. H. H. H.</i> | 33. <i>J. J. J. J.</i> |
| 6. <i>H. H. H.</i> | 20. <i>W. H. H. H.</i> | 34. <i>J. J. J. J.</i> |
| 7. <i>H. H. H.</i> | 21. <i>W. H. H. H.</i> | 35. <i>J. J. J. J.</i> |
| 8. <i>H. H. H.</i> | 22. <i>W. H. H. H.</i> | 36. <i>J. J. J. J.</i> |
| 9. <i>H. H. H.</i> | 23. <i>W. H. H. H.</i> | 37. <i>J. J. J. J.</i> |
| 10. <i>H. H. H.</i> | 24. <i>W. H. H. H.</i> | 38. <i>J. J. J. J.</i> |
| 11. <i>H. H. H.</i> | 25. <i>W. H. H. H.</i> | 39. <i>J. J. J. J.</i> |
| 12. <i>H. H. H.</i> | 26. <i>W. H. H. H.</i> | 40. <i>J. J. J. J.</i> |
| 13. <i>H. H. H.</i> | 27. <i>W. H. H. H.</i> | 41. <i>J. J. J. J.</i> |
| 14. <i>H. H. H.</i> | 28. <i>W. H. H. H.</i> | 42. <i>J. J. J. J.</i> |

1. Dr Hroch, 19. Dr Knopp physicians of thermal springs Teplice
35. Dr Weigl chief physician, 32 Dr Drechslerová physician of children hospital in Teplice
2. Dr Svoboda, chief physician of thermal springs Velké Losiny
3. Dr Ringel, 26 Dr Emer assistants-medical faculty of university in Hradec Králové /children dep./
4. Dr Malbohan chief physician, Dr Werner /12/, Dr Pokorný Al. /28/ physicians of children hospital in Třebíč
5. Dr Soudková, Dr Vojta, 9/, Dr Burešová /33/, Dr Elgrová /34/ physicians of children hospital in Brno
6. Dr Fabiánová - physician of the ministerium of healthy
7. Dr Lánik, assistant of medical faculty of university in Bratislava /orthopedic dep./
8. Dr Doležal - chief physician of thermal springs Trenčanské Teplice.
10. Dr Žimák - chief physician of children hospital in Pardubice.
11. Dr Žižka chief physician, Dr Buriánová physician of neurolog. dep. of the hospital in Karlovy Vary.
13. Dr Jindrová, 29. Dr Obrda, 38. Dr Marková assistants of medical faculty of Charles's university in Prague /neurolog. dep./
18. Dr Patočková chief physician, Dr Tachovská /42/, Dr Kříž /14/, Dr Wienerová /40/ physicians of children hospital in Prague-Krč.
16. Dr Poláková, 23. Dr Popelka, ~~physicians~~ assistants of medical faculty of Charles's university in Prague /orthop. dep./
20. Dr Michaličková chief physician, Dr Neusserová physician of children hospital in Moravská Ostrava
22. Dr Škokanová physician of the hospital Bulovka /dep. of infect. dis./
24. Dr Vlček, 27 Dr Dort, 30 Dr Zdařil, 31. Dr Moravec assistants of medical faculty of the university in Plzeň /childr. dep./
25. Dr Pokorný chief physician of thermal springs in Janské Lázně.
36. Dr Vranešič assistant of the medical faculty of the university in Plzeň /neurolog. dep./
37. /Dr Straková, assistant of medical faculty of Charles's university in Prague /childr. dep./
38. /Dr Bárdošová assistant of medical faculty of the university in Košice.
16. /Dr Fr. Blažek, assistant profesor of pediatrics of medical faculty of Charles's university in Prague, chief physician and head of children hospital in Prague-Krč.

Dear sister Kenny,

I forward you a greeting letter from Doctors taking part of the course. In the meantime I join snaps from your visit, last year in Masaryk homes. I hope you'll surely remember.

Sincerely yours

Prof. Blažek Fr. D. M.

Fr. Blažek

THE MINISTER OF PUBLIC HEALTH

Athens,

July 27, 1949.

Sister Elizabeth Kenny,
Honorary Director
The Elizabeth Kenny Institute
Minneapolis, Minnesota.

Madam:

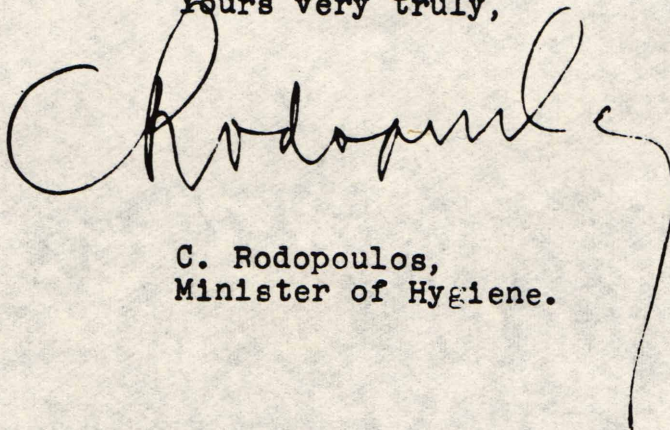
On behalf of my country as well as on behalf of my Ministry I wish to express to you my thanks for your visit this morning, and for the film, the pamphlets and other literature on the treatment of Infantile Paralysis handed to me on this occasion.

The opportunity you so kindly give us in this way to learn of the research work and treatment your Institute has done in this field is deeply appreciated, and I shall be most grateful to you if I may, from time to time, learn from you of further developments made in your Institute in the field of research and treatment of this disease.

With the renewed assurances of my appreciation

I am, Madam,

Yours very truly,

A large, stylized handwritten signature in dark ink, appearing to read 'Rodopoulos', with a long, sweeping tail extending downwards and to the right.

C. Rodopoulos,
Minister of Hygiene.

mf.

Praque, August 7th, 1949.

Sister
Elisabeth Kenny,
Savoy Hotel, L o n d o n .

Dear Sister Kenny,

The Ministry of Public Health wants to express its thanks for your visit to Czechoslovakia. You certainly noticed the great interest, with which our doctors and nurses were following your two lectures, demonstrations and the film about poliomyelitis.

You certainly also realised, that many of our doctors are using your method of the treatment of poliomyelitis as far as it can be acquired by studying your books. Therefore the Ministry of Public Health is welcoming very much your arranging for an invitation by Doctor Huenekens and is hoping in the same time, that it will be able to send one Czech doctor to the Kenny Institute in Minnesota for a four months, stay /Doctor Pokorný/.

The Ministry of Public Health also intends to arrange for a four months, course for fifty nurses and physiotherapists in the very near future, and to give them the opportunity to learn the principles of the Kenny method. For this purpose it will put at the disposal of the course a hospital with 120 beds and a rehabilitation centre with 350 beds. The ministry of Public Health is hoping, that you will send an experienced co-worker to lead the course.

One more the Ministry of Public Health is thanking you for putting at its disposal your film, that will be copied and used for didactic purposes / fitted out with Czech texts/

You will oblige us also by informing the Board of Directors of the Kenny Institute of the content of this letter.-

We beg you, Dear Sister Kenny, to accept our heartiest thanks and best wishes.

For the Viceminister:

Dr Hejlová m.p

For A.C.S.

UNIVERSITY OF MINNESOTA

The Medical School

Minneapolis 14

Dean of the Medical Science

October 21, 1949

Dr. E. J. Huenekens
Kenny Institute
18th and Chicago
Minneapolis, Minnesota

Said sorry
to miss you.

Dear Dr. Huenekens:

I should like to congratulate you on the splendid Institute on Poliomyelitis recently sponsored by the Kenny Institute. I have heard nothing but splendid comments concerning the papers presented and the frank, constructive discussions which followed.

May I express to you also my congratulations on the progress which you have made in an unbelievably short time in placing the medical affairs of the Kenny Institute upon a basis which the medical profession can approve and with which our medical school can cooperate.

For some years the Kenny Institute has made a worthwhile contribution to the treatment of victims of poliomyelitis. Under your leadership it will, I am sure, contribute also to sound medical teaching and to the scientific study of this disease which is still taking a tragic toll throughout the nation. I have had a very personal interest in this program ever since its inauguration and am pleased that my colleagues are finding it possible to cooperate with you in the development of the program which you have outlined for the Institute.

Sincerely,

(signed)

Harold S. Diehl

hsd/bdc

cc: Dr. McQuarrie

CHIEF OF BOND
VASSON

UNIVERSITY OF MINNESOTA
The Medical School
Minneapolis 14

October 29, 1949

E. J. Huenekens, M.D.
Sister Elizabeth Kenny Foundation
2400 Foshay Tower
Minneapolis 2, Minnesota

Dear Doctor Huenekens:

In answer to your request for a statement of my opinion about the status of the Kenny Treatment, I have been interested in the concept and treatment of poliomyelitis developed here by Elizabeth Kenny since it was introduced in the United States in 1940 and have used these fundamental principles of treatment in the care of patients since that time. During this period, approximately 5,000 patients have been treated under my supervision.

It is my opinion that Sister Kenny's emphasis upon the importance of muscle shortening in poliomyelitis is of great value in the care of these patients. I agree with her that it is absolutely essential for us to relieve muscle shortening insofar as possible and that treatment for this condition must be begun in the early stages of the disease -- preferably during the isolation period -- in order to obtain the best results. I, also, agree thoroughly with her reeducation techniques; and I feel that it has a sound physiological basis and is a practical technique for the treatment of patients.

No treatment is effective in preventing or correcting motor denervation, and this is true of the Kenny Treatment as well. However, the emphasis upon efficient rhythmic coordination, using those muscles which have some degree of innervation, frequently makes it possible for patients to carry on function without artificial support which was impossible by previous methods. In the past, we have emphasized strength in poliomyelitis to the exclusion of the factors of coordination and muscle shortening, which are equally as important as strength in the carrying out of daily activities. Sister Kenny has emphasized the restoration of muscle length and the importance of coordination and has de-emphasized muscle strength.

It is my opinion that Sister Kenny has made a definite and important contribution to the field of poliomyelitis and that the quality of care given to the victims of the disease throughout the United States has been improved in part through her efforts.

Yours truly,

(signed)

Miland E. Knapp, M.D.
Clinical Professor of Physical Medicine

cb

WALLACE H. COLE, M. D.

1360 Lowry Medical Arts Building

Saint Paul 2, Minnesota

October 27, 1949

Dr. E. J. Huenekens
1409 Willow Ave.
Minneapolis, Minn.

Dear Dr. Huenekens:

It is hardly necessary for me to tell you how I feel about the Kenny concept as a basis for the treatment of Infantile Paralysis. Being directly responsible for keeping Miss Kenny in this country in 1940 in order to find out more about her ideas I have watched the spread of her teachings with more than ordinary interest and am certain that the standards of therapy in poliomyelitis have progressed to a level far above any we knew before her arrival. From the orthopaedic standpoint we know that in this area there are fewer deformities in the cases coming to our hospitals for Crippled Children than formerly and that stiffness and contractures are minimal in number. I am convinced that the acute cases are comfortable much sooner and that rehabilitation and reconstructive surgery do not have to be delayed as long as we thought earlier.

As a practical Orthopaedic Surgeon I find there are many things in this concept which must be accepted as an empirical basis but I certainly hope that eventually enough basic work can be done to explain scientifically those factors which seem to work out so successfully clinically. Any studies which can be made to clear up the various points of controversy which Miss Kenny has started should be welcomed by all of us and the sooner we can scientifically separate the acceptable from the unacceptable the better.

Very sincerely,

(signed)

Wallace H. Cole, M. D.
Signed in the absence of Dr. Cole

WHC:hp

October 19, 1949

Dr. A. C. Ivy
1819 West Polk Street
Chicago 12, Illinois

Dear Doctor Ivy:

Doctor E. J. Huenekens recently told me of your interest in the poliomyelitis program in Chicago and suggested the possibility that you might be interested in my impressions of the method of managing patients with poliomyelitis here in Minneapolis.

I am pleased to tell you in the first place that since Dr. Huenekens, who is one of our leading medical men in this community and a Clinical Professor of Pediatrics, has taken the medical directorship of the Kenny Foundation, we at the University have developed a more genuine interest in the program carried on by that organization than ever before. He has really done a "bang-up job" in getting the medical profession back of the work at the Kenny Institute. The staff has been reorganized and expanded in such a way that the patients actually receive medical care.

Despite the personality difficulties that we encountered in dealing with Miss Kenny in previous years, most of us here in Minneapolis recognized that there is much of value in her particular form of physiotherapy which was worth salvaging. The conservative method which she proposed for the early care of such patients has certainly reduced the amount of post-polio crippling very materially. We still recognize, however, that there is a very important part to be played by the orthopedists in some cases after the methods of physical medicine have been exploited to their fullest extent. So far as possible, we are attempting to make the program of treatment a cooperative undertaking which involves the several specialities dealing with the different aspects of the problem.

I would be greatly interested in following the progress of your program in Chicago.

With kindest personal regards,

Sincerely yours,

(signed)

Irvine McQuarrie, M. D.

IMcQ - sk

UNIVERSITY OF MINNESOTA

The Medical School

Minneapolis 14

October 21, 1949

Dr. E. J. Huenekens
Medical Director
Elizabeth Kenny Institute
18th and Chicago Avenues
Minneapolis, Minnesota

Dear Doctor Huenekens:

I would like to summarize, for your information, my estimate of the Kenny treatment of acute poliomyelitis, and point out the application that we make of it at the University Hospitals.

In the acute stage of poliomyelitis, we place the patient on a felt mattress over bed boards with his feet against footboards, similar to the positioning used in Kenny therapy. This is important, especially in the tight patient or the severely paralyzed patient, to prevent development of contractures which otherwise may create a chronic disability.

Hot packs are used where there is muscle pain or severe tightness to afford the patient relief. We have tried a number of other methods of providing relief of pain due to muscle spasm and tightness in the acute phase of polio, and find that hot packs are still the most effective method. The number of hot packs that are used each day depends on the amount of tightness and discomfort which the patient has. Usually we use two sets in the morning and two sets in the afternoon. Where there is severe tightness and pain we may do continuous packing such as Sister Kenny advocated. We do not hot pack patients who have no pain at rest and only moderate tightness.

I believe that one of the most important things that grew out of Kenny therapy was the recognition that patients should be mobilized early in poliomyelitis. For this reason, we begin motion immediately if the patient's general condition permits it, beginning first with very gentle motion, and as the patient's cooperation is obtained we go on to more vigorous stretching. Our criterion for adequate stretching is stretching past the point of discomfort to the patient, but not the point that leaves residual pain when the stretching is stopped or results in soreness of the muscle. When this mobilization is started early, we are able to get the patient to a sitting and standing position much more rapidly, and out of the hospital more quickly than would be possible by any other means.

Muscle stimulation to reestablish the stretch reflexes and muscle reeducation is carried on just as it is by your group. In this regard I believe that the emphasis on careful muscle reeducation and the demand that the patients learn how to control each muscle individually and walk or move with a normally coordinated muscle pattern is very important for the maximal recovery of the patient. While this may result in apparently slow

October 21, 1949

progress in the early stages of the disease, the end result of maximum rehabilitation occurs more rapidly and more completely by this method than with any other which I have observed. When the patient is able to carry on his activities in a coordinated manner, we begin resistance exercises to build up his strength to the maximum level.

I agree with the Kenny therapy in its basic treatment and in the techniques and general principles. There are a few modifications of details which we carry on here. Nevertheless, the essential techniques that we use are those that were worked out by Dr. Miland E. Knapp and Sister Kenny when she was first here. In our evaluation of treatment of polio before and after the advent of the so-called Kenny treatment, we have found a tremendous amount of improvement with the new method.

Very truly yours,

(signed)

Frederic J. Kottke, M. D.
Division of Physical Science

FJK:ls

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MADE IN U.S.A.

DR. SANCHIS-OLMOS, MADRID.

After the magnificent exposition made by Dr. Zellweiger, I wish to pose certain questions to him concerning certain of his conclusions.

Dr. Zellweiger tells us that he does not like orthopedic apparatuses but I do not like them either; in certain cases, however, they are absolutely indispensable, for example in the case demonstrated by Dr. Zellweiger, by projection, of this little child, in standing position, who presents a genu-recurvatum.

In the case of this child this position is not commendable, by reason of the growth.

Dr. Zellweiger has spoken equally of tenotomy, presenting it as an operation indicated after six or eight months of the acute attack. I believe that we must conclude here that tenotomy is an operation which should never be performed in any indication of infantile paralysis. We can perform allongements, but not tenotomy.

I believe also that transplantation in the case of paralysis of the opponent of the thumb must be delayed a little because we must await not only the possibility of recuperation of this muscle but also of the motor muscle which we shall use later for the substitution.

On this occasion I insist once more on the fact that in the entire world we employ the method of Sister Kenny. We know that there are political problems in America because this method is not American and Sister Kenny is not a doctor but a nurse.

I am without prejudgments and am also disposed to learn that which can teach me something.

I wish to say equally that we do not know up to the present all the physio-pathological problems. In this illness I am not convinced that all problems result from lesions of the central nervous system.

In 1942 Dr. Sanz Ibanez, Director of the institute Ramon Y Cajal worked in experimental poliomyelitis on white mice with the virus S.K. of Jungeblut.

He found several cases of animals which presented paralytic syndromes without having any histological lesion of the marrow. On the contrary the lesions were localized in the motor area of the nerves. It was only a year that Carey in America found similar lesions.

These lesions are produced by experimental polio because enoculation of the muscle produces polio in the other animal. We have seen occasionally in our visits to the institute Ramon Y Cajal the syndromes of ~~spasms~~ in these animals. I have found the flexed leg and it was not easy to correct it.

We have tried to show this lesion in human polio and it was possible only in very few cases to find it but in the majority of cases we have not found any lesion in this small part of the muscle.

We do not know the normal distribution of motor areas in the muscles and this makes it difficult to determine the places in which we must make the biopsy in the acute cases.

In many indications the tendency to create deformities and contractures does not depend on the muscles but on the aponeurosis and the fascia.

I have tried in certain cases where I have not been able with fomentation to correct the flexo-abduction contractures of the hips and the flexion of the knee, early fasciotomy, with the best results.

It is an old operation performed by Ober and Gomet, but I practice it at the beginning of the illness if that is necessary.

I have also applied and I believe that I am the first in the world to do this lumbar fasciotomy for the correction of paralytic scoliosis at its beginning.

I have seen that scoliosis is produced by superficial and deep ilio-lumbar aponeurotic retraction and if I have not been able to correct it with conservative ^{measures} I have tried this therapeutic surgery with success.

I add that in these cases the deformity has its origin in a rather deep articular capsule.

I believe interesting a case which is entirely experimental: 15 days after the acute attack I have seen a child who had flexed feet. This equinism was not produced solely by spasms by the triceps and inflexing the knee I was not able to correct the equinism. I sought the cause of this deformity and I made an allongement of this achilles tendon but that did not correct by more than ten degrees the equinism.

I have then sectioned transversally the posterior capsul of the tibio-astragalian articulation and it is thus that I corrected the deformity.

We know that in chronic cases there are capsulary retractions and also of the soft part (skin, sub-cutaneous, cellular tissues, aponeurotic partitions, etc) (But the interesting question is that these lesions are entirely initial and it is also the merit of Sister Kenny to have drawn our attention to this point.

I do not know if these lesions result from vegetative phenomenon. I have tried to treat them by sympathetic infiltration in the ganglionic chain and in the peripheral parts, but the little children do not like the frequent prickings and the result of this treatment was not better than after warm fomentation.

I shall insist on these different considerations when I have read my report.

LIGUE NATIONALE BELGE CONTRE LA POLIOMYELITIS.

A.S.B.L. Sous le haut patronage de Sa Majesté la Reine Elisabeth.

130. Rue de Linthout.
Bruxelles.

August 10th, 1949

The President,
The Board of Directors,
Elizabeth Kenny Foundation,
Minneapolis,
MINNESOTA, U.S.A.

Dear Mr. President,

I have the honor and pleasure of sending you the enclosed report which will inform you concerning the activity of the Kenny section created by your Foundation.

The principles and the methods of Sister Kenny's treatment have been faithfully observed by her pupils, Miss Curtis and Miss Housden.

Altho our Center collects especially severe cases or those badly treated previously, the results obtained have been satisfactory, as Sister Kenny could tell you.

I would like also to say how much the presence of Sister Kenny, during the few days just past in the clinic, has meant in importance and influence to the personnel, the patients, and their families; it is certain

that her control will remain a necessity for the continuance and development of this European daughter-clinic of your Institute.

Please accept, Mr. President the sentiments of gratitude and esteem which I send you in the name of the National Foundation of Belgium against Poliomyelitis.

L. Laruelle

Doctor L. Laruelle,
P R E S I D E N T.

THE BRUSSELS POLIOMYELITIS CENTER

Report of the activity of the Kenny Section

by Dr. L. Laruelle.

Since 1929 I have applied myself to the treatment of patients attacked by Poliomyelitis; which have become more and more numerous because of the increase of regional epidemics and of the increase of sporadic cases observed from that date to this, July, 1949.

I contacted Sister Kenny for the first time and became acquainted with her ideas and technique of treatment during the epidemic of 1945, which brought her to Belgium with two of her technicians, Miss Housden and Miss Curtis.

Sister Kenny at that time, spent several days in the treatment of our many patients and her technicians remained attached to our clinic until the end of the epidemic in February, 1946.

I have followed attentively this method of treatment and its effects, but, although often solicited to do so, I refused to express my opinion, and withheld my judgment for three years, estimating that the balance sheet of a treatment begun and carried on (the pro's and con's) could not be definitely established by its efficacy in the acute phase alone, but especially by its ability to reduce the sequelae of paralysis and to reestablish motor function.

It was in this spirit, shared by the Kenny Foundation, that we obtained therefrom the renewal of the collaboration of technicians Housden and Curtis, who have been back in our treatment center from 1948 to the present day.

Their mission has been, since then, not only to direct the Kenny section of our Institute and to there apply the Kenny technique in its fullness, but to make a complete course, theoretical and practical with the object to train several Belgian nurses.

It is out of the sum of our observations and our personal experience that I make this report to the Kenny Foundation and sum up as follows our conclusions:

1. The application of Kenny method, from the earliest manifestations of the illness, reduces very notably the intensity and duration of the painfulness (syndrome algique) it has from this a sedative action very favorable.

2. The early proprioceptive stimulation of inert muscles, in a state of contraction or paresis, associated with hot fomentations, is a procedure physiologically justified, which has shown itself capable of reestablishing, temporarily at first, and then definitely muscular contraction. This stimulation of motor units capable of recuperation retrains the muscular function early, it maintains more-over metabolic activity and nourishment of inert muscles.

3. At a later stage of the malady one can see the good effects of the treatment on circulation and the state of the teguments: Skin, subcutaneous tissue, fascia, tendons. These different procedures prevent atrophy, fibrosis or fatty degeneration of muscular tissues and teguments, and consequently immobilizing contractures. The good circulatory condition and resulting vitality of the tissues, is a factor favoring later surgical intervention.

4. Other favorable therapeutic effects result from the early psychomotor reeducation applied by original techniques: on this point the results obtained by the reeducation of walking in spite of marked muscle deficiency, on subjects paralysed in one or both legs, are remarkable.

5. Kenny treatment permits us to reduce notably the early intervention of orthopaedic procedures; which like surgery, should be reserved for the late irreducible residual manifestations, or to severe cases of complete amyotrophic paralysis due to total destruction of the nerve centers.

Another conviction based on our experience however, is, that Kenny Method can only show its useful effects if it is applied by technicians possessing a profound knowledge of anatomy, of neuro-muscular physiology, trained in the methods of detecting affected muscles, in the manual technique, and possessing the gift of observation, an innate intuition and a high moral conception of their mission. The manual technique can have its fullest effects only if the psychology of the nurse, her influence, her character, maintains the patience, courage, and optimism of the patient.

I doubt that these qualities are easily realised; but I am ready to declare that Miss Housden and Miss Curtis possess them in the highest degree and are perfect prototypes of Kenny technicians.

The training course.

The preceding considerations show that without teaching, without a rigorous training in theory and technique, without nurses selected and specialized, the Kenny Method is open to criticism, misrepresentation, and abandonment, this is what has already happened in various corners of Europe.

I propose consequently to the Kenne Foundation, to create in Europe a permanent school with the aim of training a primary group of nurses who can enable doctors who desire it, to apply in their hospital service a rational treatment of Poliomyelitis in accordance with the neuromuscular mechanism of this illness.

The improved conditions of our Institution, the aid of the Belgian Red Cross rallied to our project, permits us to undertake this training destined not only for Belgian nurses but for nurses of other European countries who have already made request to us for it.

The Belgian National League can not however, create this European school without the consent; the ~~help~~ support of the Kenny Foundation, and the certainty that the cooperation of qualified teachers, such as Miss Housden and Miss Curtis, would be given us for the five first years of this training program. It would be suitable that such teachers should have sufficient knowledge of the French language, a condition easily realised by our present technicians.

Under the present circumstances we envisage this program in 2 degrees:

The first (Primary training) would have as its object to train nurses in the fundamental knowledge that would permit them to practice the treatment correctly; that is to say, to be useful auxiliaries to doctors deciding to do Kenny treatment.

The second (Advanced training) would permit the formation of teachers instructed like the nurses in Minneapolis: that is to say, capable of practising and teaching the method.

The duration of the primary course for nurses full time, having their diplomas as trained nurses, has been planned for 4 months. The duration of the secondary course has been planned for two years.

A special certificate of competence as a nurse specialist, and the degree of attainment, carrying the seal of the Belgian National League against Poliomyelitis, of the Belgian Red Cross and perhaps of the Belgian Government, would be awarded to these nurses.

According to the decisions of the International European Conferences of Brussels and of Paris, the necessity of which the World Health Organisation has just confirmed in its Convention at Rome, this personnel could be mobilised and would assume mutual international aid as planned for regions attacked.

Here enclosed you will find the programme for the training course which will be given by the Kenny instructors and by the members of the medical staff and laboratory chiefs who serve the Polio Center.

Section of Scientific Research.

The Scientific Research Laboratory has followed the study of the anatomic basis of Poliomyelitis, by using original techniques. These studies have been carried out on the nerve centers which are studied in their entirety by the technique of longitudinal sectioning which is the only technique that permits the making up of a complete summary of the lesions of the illness and of their exact topography and severity.

This study has demonstrated the persistence in these centers of neurons which are intact or affected by reversible lesions capable of recuperation on condition that they are stimulated.

The application of hot fomentations on the skin, accompanied by proprioceptive stimulation from the muscles, favors metabolic activity and consequently the recovery of neurones attacked by reversible lesions.

This anatomic research is now being carried on further and more specially on the peripheral tissues, that is to say, on the skin, the fascia, the muscles, the blood vessels and their mechanism of innervation, in man and animals. This study is being applied also to the research of visceral lesions, examples of it were already found in the intestinal tract.

Experimental Poliomyelitis ought to permit studying of the chronology of the lesions and finding of the initial preclinical lesions caused directly by the virus, and distinguishing them from secondary degenerative lesions which one observes in old cases.

The laboratory pursues further a comparative study of peripheral or central lesions in domestic animals (pigs, chickens, cattle) who contract diseases of epidemic character (of Tschern etc..) clinically resembling human poliomyelitis.

These recherches of great scientific and ~~techn~~ practical importance are now being actively pushed, using techniques the value of which is recognised by all the scientific world.

This program being known to you, I suggest to your scientific collaborators the establishment of more direct relations between our centers of study.

This teamwork, with exchange of anatomic-clinical documents, of publications etc. is a real necessity for resolving the scientific unknowns of Poliomyelitis. I therefore invite the directors of your section for scientific research to take this proposition under serious consideration.

On the occasion of her visit to our ~~xx~~ Laboratory of Research, Sister Kenny came to know of our documents. She could see that our anatomical ~~xxxx~~ findings gave a better comprehension of the symptoms of the disease. She could in fact be assured (see) that, by this evidence alone—the observed central lesions and the reversible character of many of them—the initial empiricism and the progressive adaptation and rationale of the mode of treatment which she ~~xxx~~ introduced are justified.

Sister Kenny was interested by our atlas of micro-photographic plates which "visualized" as in a film the whole range of polio lesions: central, peripheric, visceral.

I estimate that this atlas, which has demanded many years of work certainly original would be of great interest to all those who are interested in the normal and pathological Anatomy of the nervous system, in Poliomyelitis, ~~xx~~ and in a particularly objective way in the ~~xxxx~~ teaching of neurology.

Such a micro-photographic atlas, which would be annotated in several languages, has often been requested us, and would easily find a wide demand.

I am sending you a few of the microphotographs of this atlas.

Chancey

Dr. SANCHIS-OLMOS , Madrid.

Après le magnifique exposé fait par le Pr. ZELLWEIGER, je désire lui poser quelques questions à propos de certaines de ses conclusions.

Le Dr. ZELLWEIGER nous dit qu'il n'aime pas les appareils orthopédiques, mais je ne les aime pas davantage; dans certains cas, cependant, ils sont tout-à-fait indispensables, par exemple dans le cas démontré par le Dr. ZELLWEIGER, par projection, de ce petit enfant, dans la position debout, qui présente un genu-recurvatum.

Dans le cas de cet enfant, cette position n'est pas recommandable, par suite de la croissance.

Le Dr. ZELLWEIGER nous a parlé également de la tenotomie, la présentant comme une opération indiquée après 6 ou 8 mois de l'attaque aiguë. Je crois que nous devons prendre ici, comme conclusion, que la tenotomie est une opération que l'on ne devrait jamais faire dans aucune indication de paralysie infantile. Nous pouvons faire des allongements, mais pas de tenotomie.

Je crois aussi que la transplantation dans le cas de la paralysie de l'opposant du pouce, doit être retardée un peu, parce que nous devons attendre, non seulement la possibilité de récupération de ce muscle, mais aussi du muscle meteur, que nous utiliserons ensuite pour la substitution.

Je profite de cette occasion pour insister, une fois de plus, sur le fait que, dans le monde entier, nous employons la méthode de sister KENNY. Nous savons qu'il y a des problèmes politiques en Amérique, parce que cette méthode n'est pas américaine et sister KENNY n'est pas docteur, mais infirmière.

Je suis sans préjugés et suis toujours disposé à apprendre ce qui peut m'enseigner quelque chose.

Je veux dire également que nous ne connaissons pas, jusqu'à présent, tous les problèmes physio-pathologiques. Dans cette maladie, je ne suis pas convaincu que tous les problèmes dépendent des lésions du système nerveux central.

En 1942, le Dr. SANZ IBÁÑEZ, Directeur de l'Institut RAMON Y CAJAL, travaillait dans la poliomyélite expérimentale sur des souris blanches, avec le virus S.K. de JUNGBLUT.

Il avait trouvé plusieurs cas d'animaux, qui présentaient des syndromes paralytiques, sans avoir aucune lésion histologique de la moelle. Au contraire, les lésions étaient localisées dans la plaque motrice des nerfs. C'est seulement une année après que CAREY, en Amérique, trouvait de pareilles lésions.

Ces lésions sont produites par la poliomyélite expérimentale, parce que l'inoculation du muscle produit la poliomyélite dans les autres animaux. Nous avons vu, occasionnellement, dans nos visites à l'Institut RAMON Y CAJAL, les syndromes de spasmes dans ces animaux. J'ai trouvé la jambe fléchie et il ne fût pas facile de la corriger.

Nous avons essayé de montrer cette lésion dans la poliomyélite humaine et il ne fût possible que, dans bien peu de cas, de la trouver, mais, dans la plupart des cas, nous n'avons trouvé aucune lésion dans cette petite partie du muscle.

Nous ne connaissons pas la distribution normale des plaques motrices dans les muscles et cela rend difficile la détermination des endroits dans lesquels nous devons faire la biopsie dans les cas aigus.

Dans beaucoup d'indications, la tendance à se créer des difformités et contractures ne dépend pas du muscle, mais de l'aponeurose et de la fascie.

J'ai essayé, dans certains cas où je n'ai pu avec la fomentation corriger les contractures flexe-abduction des hanches et de la flexion du genou, la fasciotomie précoce, avec les meilleurs résultats.

C'est une vieille opération réalisée par OBER et GOMET, mais je la pratique au début de la maladie si cela est nécessaire.

J'ai aussi appliqué, et je crois que je suis le premier dans le monde à le faire, la fasciotomie lombaire pour la correction de la scoliose paralytique à ses débuts.

J'ai vu que la scoliose est produite par la rétraction aponeurotique ilio-lombaire superficielle et profonde, et si je ne réussis pas à la corriger avec les mesures conservatrices, j'essais cette thérapeutique chirurgicale avec succès.

J'ajoute que, dans ces cas, la difformité à ses origines dans la capsule articulaire assez profonde.

Je crois intéressant un cas qui est tout-à-fait expérimental: 15 jours après l'attaque aiguë, j'ai vu un enfant qui avait les pieds fléchis. Cet équinisme n'était pas produit par les seuls spasmes du triceps, puisqu'en fléchissant le genou je n'ai pu corriger l'équinisme. J'ai cherché la cause de cette difformité et j'ai fait un allongement du tendon d'Achille, mais cela n'a pu corriger de plus de 10° l'équinisme. J'ai alors sectionné transversalement la capsule postérieure de l'articulation tibio-astragaliennne et c'est ainsi que j'ai corrigé la difformité.

Nous savons que, dans les cas chroniques, il y a des rétractions capsulaires et aussi de la partie molle (peau, tissus cellulaires sous-cutanés, cloisons aponeurotiques, etc...) mais la question intéressante est que ces lésions sont tout-à-fait initiales et c'est aussi le mérite de M^{rs} KENNY d'avoir attiré notre attention sur ce point.

Je ne sais si ces lésions dépendent du phénomène végétatif. J'ai essayé de les traiter par l'infiltration sympathique dans la chaîne ganglionnaire et dans les parties périphériques, mais les petits enfants n'aiment pas les piqûres fréquentes et le résultat de ce traitement ne fût pas meilleur qu'après la fomentation chaude.

J'insisterai sur ces différentes considérations lorsque j'aurai lu mon rapport.

Ligue Nationale contre la Poliomyélite

Sous le Haut Patronage de Sa Majesté la Reine Elisabeth

A. S. B. L.

130, RUE DE LINTHOUT

TÉL. : 34.01.66

C. P. P. 375.87

Bruxelles, le 3 août 1949

A Monsieur le Président
de l'Institut KENNY

à

MINNEAPOLIS (U.S.A.)

Monsieur le Président,

J'ai l'honneur et le plaisir de vous adresser le rapport ci-joint qui vous renseignera sur l'activité de la section créée par votre Fondation.

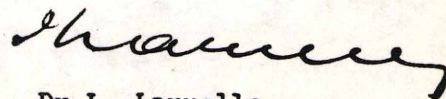
Les principes et les méthodes de traitement de Sister Kenny ont été fidèlement observés par ses élèves, Miss Curtiss et Miss Housden.

Bien que notre Centre réunisse surtout des cas graves ou antérieurement mal soignés, les résultats obtenus sont satisfaisants, comme Sister Kenny a pu le constater.

Je tiens aussi à vous dire combien la présence de Sister Kenny pendant les quelques jours passés à la clinique, a eu d'importance et d'influence sur le personnel, les malades et leur famille, et il est certain que son contrôle restera une nécessité pour la tenue et le développement de cette filiale européenne de votre Institut.

Veuillez agréer, Monsieur le Président, les sentiments de gratitude et d'estime que je vous adresse au nom de la Ligue Nationale Belge contre la Poliomyélite.

Le Président,


Dr L. Laruelle.

CENTRE DE POLIOMYELITIS DE BRUXELLES.

RAPPORT DE L'ACTIVITE DU DEPARTEMENT KENNY.

C'est depuis 1929-1930 que je me suis appliqué au traitement des malades atteints de Poliomyélite devenus en Belgique de plus en plus nombreux en raison des poussées épidémiques régionales et de la sporadicité accrue observée de cette date à ce jour : juillet 49.

J'ai pris contact pour la première fois avec Sister KENNY et pris connaissance de ses idées et de sa technique de traitement lors de l'épidémie de 1945 qui l'avait amenée en Belgique avec deux de ses monitrices : Sisters Housden et Curtiss.

Sister Kenny a passé alors plusieurs jours consacrés au traitement de nos nombreux malades et ses monitrices sont restées attachées à notre clinique jusqu'à la fin de l'épidémie, en février 1946.

J'ai suivi avec attention ce mode de traitement et ses effets mais, bien que très sollicité de le faire, j'ai refusé d'exprimer mon opinion et j'ai remis mon jugement à trois ans estimant que le bilan d'un traitement initial et persévérant ne peut être définitivement établi non seulement par son efficacité à la phase aiguë, mais surtout par sa capacité de réduire les séquelles paralytiques et de rétablir les fonctions motrices.

C'est dans cet esprit, partagé par la Fondation Kenny, que nous avons obtenu d'elle la reprise de collaboration de sisters Housden et Curtiss qui sont rentrées à notre Centre de traitement en 1948 jusqu'à ce jour.

Leur mission a été, dès ce moment, non seulement de diriger le secteur Kenny de notre Institut et d'y appliquer intégralement la technique, mais d'en faire un enseignement complet théorique et pratique destiné à former quelques infirmières belges.

C'est sur l'ensemble de nos observations et de notre expérience personnelles que je puis faire ce rapport à la Fondation Kenny et résumer comme suit nos constatations :

- 1^o) L'application de la méthode Kenny, dès les premières manifestations de la maladie, réduit très notablement l'intensité et la durée du syndrome algique : elle a de ce fait une action sédative très favorable.
- 2^o) La stimulation proprioceptive précoce des muscles inertes, en état de contracture ou de parésie, associée aux fomentations chaudes, est un procédé physiologique justifié qui s'est démontré capable de rétablir, transitoirement d'abord, définitivement ensuite, la contracture musculaire. Cette stimulation des unités motrices capables de récupération réentraîne précocement la fonction neuromusculaire; elle entretient en outre l'activité métabolique et la nutrition du muscle inerte.
- 3^o) A des étapes plus tardives de la maladie, on a pu constater les bons effets du traitement sur la circulation et l'état des téguments : peau, tissus sous-cutanés, aponévroses et tendons.
Ces différentes manoeuvres empêchent l'atrophie, la fibrose ou la dégénérescence graisseuse des tissus musculaires ou tégumentaires et, par conséquent, leur rétraction immobilisante. La bonne condition circulatoire et la vitalité des tissus qui en résultent est un facteur favorisant pour les interventions chirurgicales tardives.
- 4^o) D'autres effets thérapeutiques résultent de la rééducation psychomotrice précocement appliquée par des procédés originaux et sur ce point les résultats obtenus par la rééducation de la marche, malgré un déficit musculaire important chez des sujets paralysés d'un ou des deux membres inférieurs, sont remarquables.
- 5^o) Le traitement Kenny permet de réduire notablement l'intervention précoce de l'orthopédie qui, comme la chirurgie plastique, doit être réservée aux manifestations résiduelles irréductibles tar-

dives ou aux cas graves de paralysies amyotrophiques complètes dues à la destruction totale des centres nerveux.

Une autre conviction basée sur notre expérience est cependant que la méthode Kenny ne peut développer ses effets utiles que si elle est pratiquée par des techniciens possédant des connaissances approfondies d'anatomie, de la physiologie neuro-musculaire, entraînés aux manœuvres de détection des muscles malades, à la pratique manuelle, et possédant des dons d'observation, une intuition innée et une haute conception morale de leur mission. La technique manuelle n'a son plein effet que si la psychologie de l'infirmière, son ascendant, son caractère, entretiennent la patience, le courage et l'optimisme du malade.

Je doute que ces qualités soient facilement réalisables, mais je tiens à déclarer que Sister Housden et Sister Curtiss les possèdent au plus haut degré et sont des prototypes parfaits des techniciennes Kenny.

ENSEIGNEMENT.

Les considérations précédentes démontrent que sans enseignement, sans une rigoureuse formation théorique et technique, sans infirmières sélectionnées et spécialisées, la discipline de Kenny est vouée à la critique, à la falsification, à l'abandon : c'est déjà ce qui se produit dans différents milieux européens.

Je propose en conséquence à la Fondation Kenny de créer en Europe une école permanente en vue de former un premier groupe d'infirmières qui doivent permettre aux médecins, qui le désirent, d'appliquer dans leurs services hospitaliers une thérapeutique rationnelle de la Poliomyélite, en concordance avec le mécanisme neuro-musculaire de cette maladie.

Les conditions améliorées de notre Institution, l'aide de la Croix-Rouge de Belgique ralliée à notre projet, nous permettent d'entreprendre cet enseignement destiné non seulement aux infirmières belges, mais aux infirmières d'autres pays européens qui nous en ont dès maintenant fait la demande.

La Ligue Nationale Belge ne peut cependant créer cette école européenne sans avoir le consentement, l'appui de la Fondation Kenny et la certitude que le concours de professeurs qualifiés, tels que Miss Housden et Miss Curtiss, nous soit donnée pour les cinq premières années de cet enseignement. Il est souhaitable que ces professeurs aient une connaissance suffisante de la langue française, condition qui sera facilement réalisée par nos techniciennes actuelles.

Dans les circonstances présentes, nous envisagerons cet enseignement à deux degrés :

Le premier (enseignement primaire), aura comme objectif de former des infirmières possédant les connaissances fondamentales leur permettant la pratique correcte du traitement, c'est à dire d'être des auxiliaires utiles du médecin décidé à faire du Kenny.

Le deuxième (enseignement du second degré), permettrait de former des monitrices instruites comme les infirmières de Minnéapolis, c'est à dire capables de pratiquer et d'enseigner la méthode.

La durée des études du premier degré pour infirmières full-time, ayant leur diplôme d'infirmière générale, a été fixée à 4 mois.

La durée des études du second degré a été fixée à 2 ans.

Un brevet spécial de capacité d'infirmière spécialisée et d'agrée d'enseignement, portant cachet de la Ligue Nationale Belge contre la Poliomyélite, de la Croix Rouge de Belgique et peut-être du Gouvernement Belge, serait délivré à ces infirmières.

D'après les décisions des Conférences Internationales européennes de Bruxelles et de Paris, dont l'organisation mondiale de la Santé, dans sa réunion de Rome, vient de confirmer la nécessité, ce personnel spécialisé serait mobilisable et assurerait l'entr'aide internationale prévue pour les régions atteintes.

Ci contre, le programme fixé pour l'enseignement qui sera donné par les ministres Kenny et par les membres de l'équipe médicale et les Chefs de laboratoire qui desservent le Centre de Polio.

SECTION DE RECHERCHES SCIENTIFIQUES.

Le Laboratoire de Recherches scientifiques a poursuivi l'étude des bases anatomiques de la Poliomyélite en employant des techniques originales. Ces études ont porté sur les centres nerveux qui sont étudiés en entier par la technique des coupes longitudinales qui permet seule de faire un bilan complet des lésions de la maladie et de leur exacte topographie et de leur gravité.

Elles démontrent la persistance, dans les centres, de neurones intacts ou de neurones atteints de lésions réversibles capables de récupération à condition d'être stimulés.

L'application des fomentations chaudes sur les téguments associée aux stimulations proprioceptives des muscles, favorisent l'activité métabolique et par conséquent la reconstruction du neurone atteint de lésion réversible.

L'enquête anatomique actuelle porte plus spécialement sur les tissus périphériques, c'est à dire sur la peau, les aponévroses, les

muscles, les vaisseaux et leur appareil d'innervation chez l'homme et l'animal. Elle s'applique aussi à la recherche de lésions viscérales dont nous avons déjà pu recueillir des exemples au niveau de l'appareil intestinal.

La poliomyélite expérimentale doit permettre d'étudier la chronologie des lésions et d'apercevoir les lésions initiales précliniques dépendant directement du virus et de les distinguer des lésions secondaires dégénératives que l'on observe dans les cas anciens.

Le Laboratoire poursuit en outre l'étude comparée des lésions centrales ou périphériques chez les animaux de basse-cour (porcs, poules, bovins, etc...) qui contractent des maladies de caractère épidémique (de Téchen, etc...) cliniquement semblables à la Poliomyélite humaine.

Ces recherches de grande importance scientifique et pratique, sont actuellement poussées activement et utilisent des techniques dont la valeur est reconnue par tous les milieux scientifiques.

Ce programme vous étant connu, je suggère à vos collaborateurs scientifiques d'établir des relations plus étroites entre nos centres d'études. Ce travail en équipe, avec échange de documents anatomo-cliniques, de publications, etc..., est actuellement une nécessité pour résoudre les inconnues scientifiques de la Poliomyélite. J'invite donc les dirigeants de ce secteur à prendre cette proposition en sérieuse considération.

A l'occasion de sa visite au Laboratoire de recherches, sister Kenny a pris connaissance de nos documents. Elle a pu voir que nos constatations anatomiques donnent une meilleure compréhension des symptômes de la maladie. Elle a pu en effet se rendre compte que, à elles seules, les lésions centrales observées et le caractère réversible de

beaucoup d'entr'elles, justifient l'empirisme initial et l'adaptation progressive et rationnelle du mode de traitement qu'elle a introduit.

Sister Kenny s'est intéressée à notre atlas de planches microphotographiques qui "visualisent", comme un film, tout le tableau des lésions de la Poliomyélite : centrales, périphériques et viscérales.

J'estime que cet atlas, qui a demandé de nombreuses années d'un travail certainement original, présente un grand intérêt pour tous ceux qui s'intéressent à l'anatomie nerveuse normale et pathologique, à la Poliomyélite et, d'une façon particulièrement objective, à l'enseignement de la neurologie.

Un tel atlas microphotographique, qui serait commenté en plusieurs langues, nous a été souvent demandé et trouverait facilement son placement.

A titre exemplatif, je vous adresse quelques unes des microphotographies de cet atlas.

J. Hauw

Bruxelles, 8 août 1949.



For Messenger Call PLaza 5-8109

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QUOTE SISTER KENNY DELMONICO HOTEL NEWYORK CITY

KINDLY OBTAIN PERMISSION OF THE FOUNDATION TO GRANT DOROTHY

CURTIS EXTENSION OF LEAVE IN ORDER THAT SHE MAY GIVE

INSTRUCTION TO DOCTORS CLASS TO BE HELD FROM FEBRUARY

20TH TO MARCH 7TH UNQUOTE

MINISTRY OF HEALTH

CFM 20TH 7TH AND PSE MSGE IS ORDINARY



F. J. A. DITTER, M. D., F. A. C. S.
SURGERY

May 13, 1948

510 Larson Building
Yakima, Washington

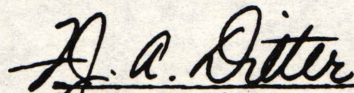
Dr. T. A. Angland
805 West Yakima
Yakima, Washington

Dear Dr. Angland:

This is a letter in compliance with your request concerning the over-all impression obtained by the Medical Advisory Board of the National Polio Foundation.

Following the recent survey, it was the concerted opinion of the Board that the administration, physical facilities and work performed by the Kenny technicians were excellent. It is my belief that the medical profession locally has accepted the Kenny Foundation as established here as part of the treatment program.

Very truly yours,

 M. D.
F. J. A. Ditter
Chairman, Medical Advisory Board
National Polio Foundation

FJAD:rh

INSTITUT NEUROLOGIQUE BELGE

Institution d'Utilité Publique

Laboratoire de Recherches

BRUXELLES-4, LE 20-XII-1949

150 RUE DE LINTHOUT TÉLÉPH. 33.64.21

Sister Elisabeth Kenny
Kenny Foundation
Minneapolis
Minnesota.

Dear Sister Kenny,

It was not possible for me,owing to some special work,to answer sooner all the questions concerning the publication of which you and your staff have taken the initiative,and which will be justified I believe,by the most complete investigation which has ever been made of the anatomopathology of Poliomyelitis.

The plan of the microphotographic atlas,which is to illustrate all the aspects of the central and peripheral lesions in human and experimental Poliomyelitis,is now well established,thanks to the documents we have recently collected and which have made our investigations more complete.

We have been able to determine approximately the dimensions of the Atlas-book,the number of plates,the number of pages of text which is to help the understanding of the panoramic plates which were obtained by our special technique, and to allow the applications of those findings to nervous physiology and to the pathology of Polio.

Herewith the instructions to be transmitted to the editor,with whom we should have direct contact for the details of the execution.

with my compliments
and the best Season's Greetings

Thammy

Sister Elizabeth Kenny Foundation

2400 FOSHAY TOWER
MINNEAPOLIS 2, MINNESOTA

E. J. HUENEKENS, M. D.
MEDICAL DIRECTOR

June 30, 1949

TO WHOM IT MAY CONCERN:

For the last eight years at the General Hospital in Minneapolis, and the Sister Elizabeth Kenny Institute in Minneapolis, the medical staff and Sister Kenny have taught that the disease commonly known as anterior poliomyelitis is a complex systemic disease, presenting many clinical manifestations, and that it attacks the peripheral system.

Sister Kenny's concept that poliomyelitis is largely a systemic disease, revealing its first clinical manifestations in the peripheral structures, was based upon her years of clinical observations.

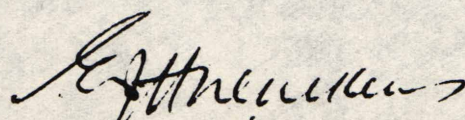
Recently published reports by scientific investigators, (1,2,3,4,5,6,7) present evidence that the rationale for the teaching sponsored by the Sister Elizabeth Kenny Foundation does not rest on clinical observations alone. The Kenny Foundation has observed that early treatment of the peripheral lesions prevents much of the crippling after-effects of this disease.

It is also recognized that there may be strains of virus differing among themselves, which exhibit in varying degree the ability to produce peripheral or central nervous system pathology.

The Sister Elizabeth Kenny Foundation stands firmly behind its teaching program, its physicians, its technicians, and Sister Kenny. It also points with pride to the end results of patients treated by the complete Kenny method.

It is a source of satisfaction to the Sister Elizabeth Kenny Foundation that wherever the work is demonstrated under medical supervision in its entirety it is agreed by the medical supervisors that something new and valuable has been presented. The treatment evolved is based on the invasion of peripheral structures and the belief that the disease is systemic in nature.

(1) Carey, Proc.Soc.Exp.Biol.&Med., 1943, 53, 3; (2) Carey, J.Neuropath.&Exp. Neurol., 1944, 3, 121; (3) Ibanez, Cajal Institute, 1944; (4) Dalldorf and Sickles, Science, 1948, 108, 61; (5) Enders, Weller and Robbins, Science, 1949, 109, 85; (6) Rustigian and Pappenheimer, J.Exp.Med. 1949, 89, 69; (7) Ludden and Edwards, Am.J.Path. 1949, 148, 357.


Medical Director



EXECUTIVE OFFICE

State of Minnesota
St. Paul

LUTHER W. YOUNGDAHL
GOVERNOR

March 8, 1950

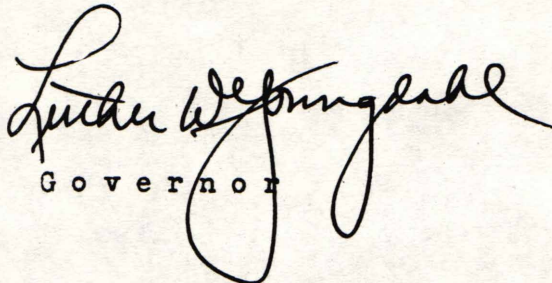
To Whom It May Concern:

The bearer of this letter, Sister Elizabeth Kenny, is hereby designated "GOOD-WILL AMBASSADOR" for the State of Minnesota in grateful recognition of the devoted service which she has ably rendered to the people of this commonwealth, the nation, and the world through a lifelong fight against the dread disease, poliomyelitis.

We in Minnesota are proud that Sister Kenny has made our state the center in which to carry on her great humanitarian work. It was with a deep sense of satisfaction that we learned Congress has granted her perpetual, permit-free passage across the borders of the United States. We have further rejoiced to see Sister Kenny chosen in a national public-opinion poll as one of the most admired women of the nation.

I shall personally appreciate all courtesies and assistance which may be given to Sister Kenny in the course of her travels and work to bring new hope and happiness to the victims of polio.

Sincerely yours,


Governor

LWY:mb

RIVERSIDE COUNTY HOSPITAL
ARLINGTON, CALIFORNIA

November 4, 1949

Sister Elizabeth Kenny
The Biltmore Hotel
515 So. Olive Street
Los Angeles 13, Calif.

Dear Sister Kenny:

We were indeed most happy to have you visit our hospital yesterday and inspect our post-polio ward and the work being done there by Mrs. Ida Kay. Your approval of Mrs. Kay's work was comforting, although it confirmed my own opinion and that of many members of our Attending Staff who have had occasion to work with her in the care of our polio patients. I have no hesitancy in stating that more progress has been made by Mrs. Kay in using the Kenny technique that I have ever seen accomplished here or elsewhere using other methods.

I sincerely regret that a previous engagement prevented my being present at the luncheon given in your honor at the Mission Inn. If you again have an opportunity to visit our hospital, I would be grateful if I could be notified in advance and I certainly would make every effort to be present.

Very truly yours,

RIVERSIDE COUNTY HOSPITAL



H. D. Stailey, M. D.
Superintendent

HDS:con

February 15, 1950

Sister Elizabeth Kenny
Elizabeth Kenny Foundation
Minneapolis, Minnesota, U.S.A.

Dear Sister Kenny,

How nice it would be if one who was present in so many hearts could have joined them at graduating time to see and hear her work spread, and enjoy the triumph of the truth having prevailed.

You will surely meet some day your disciples in Czechoslovakia: they are looking forward to the realization of the promise given them in your New Year's cable.

First of all they thank you for your gift of healing put into their hands, and for the ^{outstanding} teacher you sent them in Miss Curtis. Perhaps she might have done as well in any country; but here she certainly gained the sympathy of every one she came in touch with. She was a brilliant ambassador, and her success in promoting your work was recognised by all from the humblest of her students to the officials of the Ministry of Health.

Your message of hope to all our polio victims was transmitted to a group of people who have acquired, together with the theoretical knowledge and practical training some of your own energy and faith in the final victory over this disease.

They all feel the four month's course was too short; and they are urging everyone who could help them, to arrange for an advanced course next year. They hope they could then show their teacher some good work done, and by it prove to her that she can look back on her course with pride.

We thank you once more for all you have done to help our children enjoy their lives in health and beauty.

The graduating ceremony with its speeches was a touching one. The students signed their names with tears in their eyes, and it did not come out too tidy, but you will certainly excuse them after having read this apology.

Their farewell words I quote in ending this letter: "God bless her work and give us strength to carry it on according to the examples set before us."

Janské lázně
Czechoslovakia

Prof. M. Vetterová - Pastinková
interpreter pro tem.
to Miss Curtis

Věra Hrušková
Student Representative.

Dorothy E. Curtis, KT
 Prof. M. Vetterová-Pasinková
 Dr. Frant. Pokorný
 Dr. Marie Tadmér
 Dr. Alžběta Krummlová
 Věra Hrušková
 Věra Kyjovská
 Karel Milab
 Rosalie Šepánková
 Krummlová Marie
 Barch-garstka
 Spinnová
 Alžběta Růžičková
 Pavla a
 Brůhová Marie
 J. Hlammlová
 J. Chládková
 Bieřunová Eva
 J. Raxignatová
 J. Hančlová
 Machlová Věra
 Sr. Margaretha Benešová
 Alžběta Krummlová
 Marie Šestáková
 Černá Paulína
 Sen. M. Vojtěchová Maxmurová
 J. Roselina Hegerová

Poláčková Eliška
 Byamová Štěpána
 Novotná Marie
 Kuchlová Věra
 Trnková Milana
 Plachová Karla
 Lysková Marie
 Jákoubek Stanislav
 Těža Kvačková
 Luková Ludmila
 Hlávová Popelková
 Tárous Jitka
 Šotková Marie
 Hlávová Olga
 Šotková M.
 Pavla M.
 Jáblová
 Práche Janina
 Onouřková M.
 Des. Lucie Hlávková
 R. Melinda Růžičková

ROBERT BINGHAM, M. D.
3205 MAIN STREET
RIVERSIDE, CALIFORNIA

ORTHOPEDIC SURGERY

October 4, 1949

TELEPHONE 1-0205

Sister Elizabeth Kenny
Sister Elizabeth Kenny Foundation
2400 Foshay Tower
Minneapolis 2, Minnesota

Dear Sister Kenny:

It is with great pleasure that I report to you on the results of almost four years experience with the Kenny Treatment at the Riverside County Hospital, Arlington, California. At this time 203 cases of acute poliomyelitis have been admitted. To date of writing 161 have been discharged as "RECOVERED", 24 are under treatment as out-patients greatly "IMPROVED", and 18 are in the hospital as acute or convalescent cases of less than a year since onset.

For comparison, before 1946 poliomyelitis patients were sent to the Orthopedic Hospital after two weeks isolation in the contagious disease ward. They received, at best, only a poor imitation of your treatment, including "lay-on" packs, "night splints" and "early ambulation in braces". Of these cases, subsequently seen and followed in the Crippled Children's Clinics of Riverside County, over 50% were put in braces or had corrective surgery for deformities within two years of the onset of their illnesses.

In contrast, of the 185 patients who have been discharged from

2.

the hospital after receiving the Kenny Treatment, only 8 patients (less than 5% of the total treated in 1946, 1947, and 1948) have required braces, crutches or reconstruction surgery.

The Kenny Treatment which you introduced to the United States has accomplished much in the nine years of its American Experience:

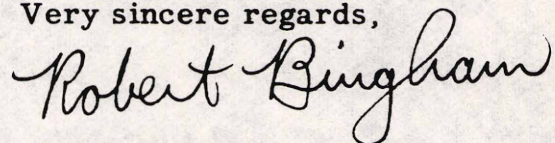
1. The Kenny Treatment has practically abolished the use of plaster casts and splints, and diminished the use of conventional braces and conventional crutches in the treatment of acute poliomyelitis.
2. The Kenny Treatment, when used correctly, has prevented muscle contractures and deformities, thus reducing to about one tenth the amount of corrective surgery infantile paralysis cases previously required.
3. The Kenny Treatment, by introducing new concepts of the clinical picture and pathology of acute poliomyelitis, has enabled doctors to diagnose many early and mild cases which were previously unrecognized until deformities or paralysis developed.
4. The Kenny Treatment, by its new and original methods and perfections of therapy has stimulated interest and study of the disease on the part of doctors, and increased public

3.

awareness and knowledge of the results that can be obtained by this treatment until today, 91 of the 93 hospitals in the United States which treat any large number of poliomyelitis patients now use the Kenny Treatment.

5. The Kenny Treatment, by the challenge of its results and the tireless efforts of Sister Kenny and her associates, has stimulated more research into the cause and effects of poliomyelitis in the past nine years than was done in the previous thirty-nine years.

Very sincere regards,

A handwritten signature in cursive script that reads "Robert Bingham". The signature is written in dark ink and is positioned above the printed name.

Robert Bingham, M.D.

RB:bjb

Sister Kenny Wins New Medical Praise

By VICTOR COHN

Minneapolis Tribune Staff Writer

Sister Elizabeth Kenny and her polio treatment won new medical recognition here Monday.

Some 60 specialists from several states attended a Kenny foundation seminar—first of its kind—and a Columbia university scientist told them of laboratory findings that he believes support Sister Kenny's opinions.

The scientist was Dr. Claus W. Jungeblut, bacteriology professor in the Columbia college of physicians and surgeons, New York City. The doctors were Minneapolis for three days of discussions and demonstrations at the Nicollet hotel and Kenny institute.

ISSUES UNDECIDED

Not all agreed with Miss Kenny 100 per cent, or near it. And Dr. Jungeblut, although he called evidence in favor of Miss Kenny "convincing," also said the issues involved are far from decided.

Yet a few years ago—so bitter was the controversy between Sister Kenny and the medical profession—such a meeting could hardly have been held.

And if it had been, many of those now here, probably would not have attended.

The controversy that remains is not over Kenny treatment—that or a modification of it has been widely adopted.

What remains is to determine what happens to the body in polio—whether the disease, as long believed, primarily involves the central nervous system (brain and spinal cord); or whether, as Miss Kenny contends, it is primarily a disease of the periphery (surface of the body), affecting the muscles

EVIDENCE MOUNTS

She said yesterday that unless treatment is carried out by technicians fully trained in her concept, it "could not be satisfactory and must retrogress"—and that "unfortunately" this is happening.

Dr. Jungeblut—Minnesota-born though he speaks with a

Dutch accent—called understanding of polio "still obscure."

But he said evidence gathered within the past half-decade in his and other laboratories shows that nearly 90 per cent of all cases in animals may be limited to the peripheral system, with central nervous system involvement "an occasional terminal complication."

If polio is first of all invasion of the spinal cord, he added, there is "no hope" for a chemical treatment—that is, for an anti-polio drug.

But if the disease really starts peripherally, he said, "it is quite conceivable" some drug may be found.

Dr. Jungeblut, 59, was born in St. Paul, but his parents took him to The Netherlands, their native



SISTER ELIZABETH KENNY
"Convincing" evidence

country, a few years later. He was trained in Switzerland and Germany and returned to the United States shortly after World war I. Another speaker yesterday, Dr.

Gilbert Dalldorf, told of a newly recognized disease, much like polio but not as serious, that apparently masquerades as polio.

It was first found in eastern states in 1948 by New York state health department and Yale university doctors. Dr. Dalldorf is a New York health official.

Dr. Dalldorf said anyone treating polio must now consider "this new disease" and that he hopes for a diagnostic test so doctors may distinguish it from polio in their patients.

Dr. E. J. Huenekens, medical director of Kenny foundation, opened yesterday's sessions in the Nicollet hotel.

Huenekens said he accepted direction of Kenny institute in Aug-

ust, 1948, "on condition that I would have full control of medical treatment."

CO-OPERATION CITED

He said he took the job because he believed Kenny treatment "the best so far devised" and because Kenny institute "did not have broad enough medical coverage."

"I have had full co-operation from the board of directors and Sister Kenny," he said.

He added that Miss Kenny, although retired, has been "invaluable to us as a teacher, technician and consultant on more difficult cases."

He called the current seminar "the first step in informing the medical profession of Kenny methods" and urged discussion "with no holds barred."

ORTHOPEDIC CLINIC

532 MEDICAL ARTS BUILDING
WINNIPEG, CANADA

September 28, 1949

W. A. GARDNER, M.D.
K. C. MCGIBBON, M.D.
A. E. DEACON, M.D.

Sister Elizabeth Kenny,
2446 Park Ave.,
Minneapolis, Minn. U.S.A.

Dear Sister Kenny:

It is with real regret I find myself unable to attend the Polio Seminar in Minneapolis in October.

I am still using the Kenny treatment as taught to us during your visit here in 1941 and I still find it the most satisfactory. We had a small epidemic in 1942 and 1943 and a fairly large epidemic in 1947. There have also been a few cases each year between epidemics.

The symptoms of spasm, incoordination, and alienation have been observed in many cases; spasm in all cases. The recognition of spasms has enabled us to diagnose early many cases which did not go on to paralysis.

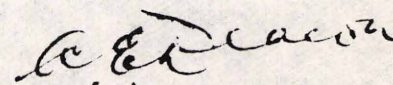
At the Children's all the polio cases are immediately examined for spasm, placed in a polio bed, and the Kenny Foments applied to the spastic muscle groups. These are continued until the muscles are no longer tender and have returned to there normal resting lengths.

Muscle re-education is begun even before all the spasms have been eradicated. We try to keep the patient aware of those muscles which he can use and to restore to his awareness those muscles which have become alienated. Reflex stimulation through proprioceptive apparatus has been of great value in this. Stretching of the skin and fasciae has proved to be of benefit in preventing and correcting contractures.

Since using the Kenny Treatment no serious deformities have occurred in our patients. Less than one percent have required any corrective surgery or even braces. In 1943 Mrs. Ross compared one hundred polio cases treated by us before 1941 with one hundred similar cases treated at the Children's Hospital by the Kenny Treatment and her conclusion was that the results with the Kenny Treatment were ten times better. What is most encouraging is that many General Practitioners throughout the Province have familiarized themselves with the Kenny Concept and Treatment and are applying the treatment to their patients in the early hours of the disease, the most advantageous time.

With best wishes for a successful meeting.

Yours truly,



A.E. Deacon, M.D.

AED/G

THE BILLIG CLINIC

FOR PHYSICAL HABILITATION

A CALIFORNIA NON-PROFIT CORPORATION

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536 SOUTH HILL STREET
PARAMOUNT THEATRE BUILDING
LOS ANGELES 14, CALIFORNIA
TELEPHONE MUTUAL 3668

September 23, 1949

Sister Elizabeth Kenny,
2446 Park Avenue,
Minneapolis, Minnesota.

Dear Sister Kenny:

First of all I take this opportunity to again congratulate you on your work.

To me it is truly amazing that you could, without scientific aid, have the astuteness of observation to note by clinical observation the disturbance in function in the disease of poliomyelitis. It is also truly amazing that you could recognize these things with sufficient conviction to insist on their factualness and carry through an education programme with such conviction.

Let me enumerate a few points which are scientific knowledge and which, prior to your advent, had not been applied to poliomyelitis.

1. Sherrington's Reciprocal Innervation.

Many times have I seen you demonstrate the method by which you could, in a few moments, restore the mutual contraction and relaxation balance of opposing muscles, and many times have I watched you demonstrate that this disturbance is one of the first things that "goes wrong" when a person is affected with poliomyelitis.

2. Your teaching that fibrous tissue contracture is a generalized result of poliomyelitis throughout the body. Recently Researchers on steroids have shown that the generalized fibrositic contracture in poliomyelitis is truly there and is associated with a low production of steroids, chiefly androgens. This low production of steroids has a simple basis of fact if we are to remember that in acute toxic infections, such as poliomyelitis, the glandular secreting cells for steroids undergo cloudy swelling and loss of function; any pathologist knows

knows this and it is taught routinely in the first course in pathology in every medical school. Again my hat is off to you.

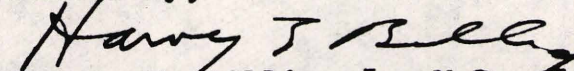
3. The use of continuous hot packs and passive and active mobilization in restoring muscle fiber function. It is noted that long after you insisted on the importance of this that electromyographs have shown that there are really only two ways of influencing muscle fiber to stay recoverable, one of which is the mechanical stimulus of motion, and the other is continuous heat.

Dr. James Golseth, Professor at the University of Southern California Medical School and formerly of Northwestern University, for example, has some beautiful reports of research work proving this.

I could go on and on, showing in each instance, the scientific proof that is now known of the points enumerated and insisted upon by you long before the scientific research had even been done. I trust that recognition will always tend to come concerning one particular point, namely, that the treatment of poliomyelitis from its inception onwards must be carried out by people who are aware of a specificity of knowledge and who have the understanding to apply this knowledge correctly and intensely.

Again may I congratulate my friend Sister Kenny.

Sincerely,



Harvey E. Billig, Jr. M.D., F.I.C.S.,
Medical Director, Billig Clinic.

Qualified International Board of Orthopedic
Surgery

Assistant Professor, Orthopedics,
College of Medical Evangelists
Commander, Medical Corps, Orthopedic
Specialist, U.S. Naval Reserve
(Inactive)

Instructor, University of California,
Extension Division.

Vice-President, Hollywood Presbyterian
Hospital Staff.

Thomas A. Angland, M. D., F. A. C. S.

Leland R. Lugar, M. D.

805 West Yakima Avenue
Yakima, Washington

Practice Limited To
Orthopedic Surgery

Phone 9955

September 21, 1949

Miss Elizabeth Kenny
2446 Park Avenue
Minneapolis, Minnesota

Dear Miss Kenny:

I hope that this small report will be the sort that will suffice for your purpose.

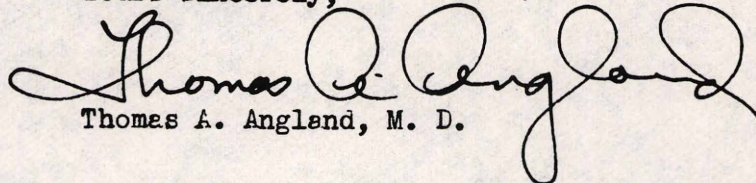
We have not, and I doubt that anyone in a small town can run a group of highly scientific reports.

We started a study of bone growth with Kenny treatment in 1945. It should be ready to complete in 1950. It would follow very successfully the article published in Journal of Bone and Joint Surgery—July 1949 by Stinchfield Reidy and Barr. The article is entitled "The Prediction of Unequal Growth of the lower extremities in Anterior Poliomyelitis". It would take several months of hard work to produce an article totally acceptable to the Orthopedic profession but would leave little room for argument on the proponents of pre-Kenny treatment.

You have my best wishes for your future success. I am proud to have played a small part in the work.

With kindest personal regards—

Yours sincerely,



Thomas A. Angland, M. D.

TA4:ab

Thomas A. Angland, M. D., F. A. C. S.
805 West Yakima Avenue
Yakima, Washington

Practice Limited to
Orthopedic Surgery
Phone 9955

September 22, 1949

Mr. Rex Williams, Executive Director
Sister Elizabeth Kenny Foundation
Eastern Area
507 5th Avenue
New York 17, New York

Dear Mr. Williams:

I have been informed by F. A. Rowe, Secretary to Sister Kenny, that the Honorable Francis Ford, High Commissioner of Australia for the Dominion of Canada will be in Minneapolis in October 1949 for the purpose of evaluating the work Sister Kenny has done during her nine years of work in the United States.

As one of the medical observers, I have been asked to give my opinion. My association with her work has been limited to the period since 1945.

I practice Orthopedics in a small Northwestern town. We have treated cases of necessity without complete scientific controls. The opinions I express are based on clinical observations compared with experience prior to my familiarity with Miss Kenny's work.

Since 1945 I have had well trained Kenny technicians working with me in treating our cases.

I am enclosing my observations of the newer pathological and physiological concepts of the disease which are at least in good measure due to Miss Kenny's influence.

The clinical side of poliomyelitis remained fairly stationery for decades prior to Miss Kenny's appearance in the United States. Muscle spasm, mental alienation, skin tenderness, irritability and the protective attitude of the patient were pointed out as symptoms of the disease. These signs along with other observations made by Miss Kenny allowed an earlier diagnosis of the disease to be made and undoubtedly helped us to make the diagnosis in some cases that would have previously been missed.

Mr. Rex Williams
September 22, 1949
Page 2

In the 1930's it was felt that rest in a protected position would provide the only assistance that could be given on affected muscles. Miss Kenny's use of heat to relieve the muscle spasm and pain, plus early motion of the affected parts has been routinely accepted since then.

Some hospitals specializing in the care of poliomyelitis during that period (1930's) refused to accept for care any cases other than those with established paralysis in the chronic phase. A changed concept now regards very early active treatment in the acute phase a necessity.

Splinting and bracing of the affected parts was a routine measure in the 1930's. The Kenny concept suggested that the indiscriminate use of these appliances may have caused irreversible fibrosis to occur in the muscles, fascia, and skin. Many of these changes can be prevented by proper technical maneuvers taught by Miss Kenny.

Miss Kenny stressed the generalized nature of the disease, showing that it involved the peripheral structures in addition to the spinal cord. There has been laboratory evidence since that time which have proven that the central nervous system is not the only organ attacked.

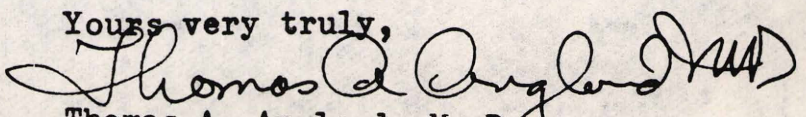
The Kenny Institute was organized with one of its prime objectives to be a training center for doctors and nurses intent on furthering their knowledge of poliomyelitis. So far as I was able to find out information and instruction has been readily available to properly trained individuals.

The change in the concept and treatment advocated by Miss Kenny has focused attention on poliomyelitis. She has stimulated and furthered scientific research into the various phases of the disease.

Miss Kenny has been wise enough to see that no one alone could conduct all of the work. She has enlisted the aid of highly trained observers to evaluate her methods and to bring her contributions into regular medical channels. In this way a critical analysis can be made--the value and limitations can be scientifically proven.

In my opinion a great service has been devised, demonstrated and properly given to the general advancement of public welfare.

Yours very truly,


Thomas A. Angland, M. D.

TAA:ab

May 10, 1949

To The Honorable
Secretary of State
Washington, D. C.

Dear Sir:

We, the undersigned, members of the medical profession, recognize that Sister Elizabeth Kenny has brought to the medical men of this country a new concept concerning the symptoms and conditions presenting themselves in the disease infantile paralysis, and a satisfactory treatment minimizing the crippling effects of this disease.

Further, upon close association with Miss Kenny and her work, we have come to recognize the fact that there is much additional knowledge which she should impart that will mean much to the health and well-being of the people of our country; that is, time permitting.

We have, therefore, requested Miss Kenny to record this knowledge per medium of documentary film and manuscript, and for such an objective Miss Kenny has informed us she is prepared to undertake this project, providing medical assistance is supplied to present such knowledge in terms acceptable to the medical world.

Recognizing that this objective will cover a space of many months, and understanding that Miss Kenny's visitors visa expires in four months time, we would, therefore, appeal that she may be supplied with a permanent visa in order that she may periodically visit other centers and re-enter the United States without any unnecessary hardship.

Respectfully yours,

E. J. Hennkens M.D.
E. J. Hennkens, M.D., Medical Director
Elizabeth Kenny Institute, Minneapolis, Minn.

George O'Hanlon M.D.
George O'Hanlon, M.D., Medical Director
Medical Center, Jersey City, N.J.

Gerald W. Sinnott, M.D.
Gerald W. Sinnott, M.D., Assistant to Director
Medical Center, Jersey City, N.J.

Miland E. Knapp, M.D.
Miland E. Knapp, M.D., Prof. of Physical Medicine
University of Minnesota, Minneapolis, Minn.

OUT OF STATE

Wallace Cole, M.D., Prof. of Orthopedic Surgery
University of Minnesota, Minneapolis, Minn.

SPECIAL LETTER ATTACHED

John F. Pohl, M.D., Consultant
Elizabeth Kenny Institute, Minneapolis, Minn.

S. R. Seljeskog M.D.
S. R. Seljeskog, M.D., Superintendent
Elizabeth Kenny Institute, Minneapolis, Minn.

Marvin A. Stevens
Marvin A. Stevens, M.D., Medical Director
Elizabeth Kenny Institute, Jersey City, N.J.

JOHN F. POHL, M. D.
1945 MEDICAL ARTS BUILDING
MINNEAPOLIS 2, MINNESOTA

ORTHOPEDIC SURGERY
BONE AND JOINT DISEASES
FRACTURES, INJURIES
AND DEFORMITIES

May 16, 1949

The Honorable Dean Acheson
Secretary of State
The United States of America
Washington, D. C.

Dear Sir:

It has been my privilege during the past nine years to have worked in close association with Miss Elizabeth Kenny. During this time Miss Kenny has demonstrated a treatment for poliomyelitis which has minimized the crippling after effects of this disease to a highly satisfactory degree. The treatment is based upon original observations regarding poliomyelitis which are new in approach but logical in theory.

Having in mind the health and welfare of the children of America it is my belief that Miss Kenny can be of further service to this country. There is much still to be learned regarding poliomyelitis.

Miss Kenny has a real contribution to make to the American Medical Profession and she is willing to be of service. Her permanent presence in America is greatly to be desired.

Very truly yours,

A handwritten signature in cursive script, reading "John F. Pohl". The signature is written in dark ink and is positioned below the typed name "John F. Pohl".

Ethel T. Calhoun, M.D.

A Report On The Use of The Sister Kenny Concept and
Method of Treatment for Poliomyelitis Patients at
Oakland County Contagious Hospital, 1944 - 1949

Following study of Sister Kenny's concepts and methods of treatment during 1943, I first treated patients at Oakland County Contagious Hospital in the fall of 1944.

We had many difficulties in obtaining personnel during the war years and so I, personally attended to training hot-packers and worked on the patients. I, therefore had an opportunity to closely observe the treatment and the results obtained. During this period we have treated 355 cases.

I have had Kenny technicians with two years or more of training at the Kenny Institute for only the past year. Previous to that time I had nurses who had trained for shorter periods of time at the Kenny Institute. Often for long periods of time I carried on alone. We have, therefore, not had an ideal center with sufficient help, but in spite of this I have been greatly impressed with the results which we have obtained.

During this period we have treated some patients who had their acute attack months or years previously and we were able to see marked improvement in many of these cases. We were able to help some of these patients to the extent that they were able to discard braces. We were also able to observe patients who had not received Kenny treatment and compare them with patients treated by us in the acute stage. Patients who had received the Kenny treatment, even those who had considerable residual weakness and many non functioning muscles, walked better than patients who had more power but who had never had their muscles restored to normal length and who had tightness and contractures. Many of these old polio patients who had been treated by immobilization only, had severe atrophy and impaired circulation, with blue extremities, dripping with perspiration, and often with ulcers present. We have observed that the skin of our Kenny treated patients is soft and pliable and that the circulation is good. Even in the comparatively few patients with denervation of the lower extremities, there is very little atrophy and these patients often remark that they are very thankful they do not look deformed.

We feel that many patients formerly who did not have denervation were handicapped by shortening of muscles, skin changes and changes in fascia which could have been prevented or minimized by proper attention to the peripheral structures.

2.

We find that each year we learn how to better care for these peripheral structures as we have gained experience in the application of Sister Kenny's concepts. We have learned how to stimulate non functioning muscles and muscles have been coaxed back to function. We have observed some remarkable changes in extremities and their muscles and know that if our former ideas of anterior horn cell destruction in all polios with loss of function were true, we could not restore function to these apparantly paralyzed muscles. We will leave it to the research doctors to explain why some of these simple procedures, if faithfully followed, will bring such astounding results.

We have seen the pain and muscle spasm relieved by hot packs in all of our acute cases. We have never had to use sedatives for hot packs are available day and night to relieve pain. This relief of pain by the use of moist heat is very important in cases with upper neuron involvement, where the use of sedatives is dangerous. The relief of spasm and the correction of deformities caused by spasm is often dramatic, as in one patient whose foot was pulled into a varus or "club foot like" deformity. Had this not been corrected he would have had a persistent deformity. This boy was discharged after four months treatment with a perfectly normal foot. Results are not always obtained so quickly or so dramatically but when one sees the gradual improvement which goes on week after week until finally we have such remarkable improvement we begin wondering if we imagined the original condition of the patient. We then go back to read the charts and find that the muscles which are now excellent at one time had no function.

The idea of preventing deformities has appealed to me for many years ago I worked as an orthopedic resident for an able orthopedist who was trying to correct deformities. While many of the results of this surgery were remarkable, the results still could not compare to normal functioning muscles. The Kenny method is preventative medicine which modern medicine advocates today. The few cases requiring surgery will respond better if the peripheral structures have been given the good care advised by Sister Kenny.

I hope that Sister Kenny will continue to impart knowledge and information gained from her many years experience studying poliomyelitis. I hope she will revisit our center and continue to give us the benefit of her amazing powers of observation.

Concerning the Disease
Poliomyelitis

1948

*This Pamphlet is Prepared for the
Consideration of the Medical Officers of the
Children's Bureau of the Federal Security
Agency, in the United States of America,
and Others*

Elizabeth Kenny

Elizabeth Kenny Institute
Minneapolis, Minnesota

and

Elizabeth Kenny Institute
C. 10-11

Jersey City Medical Center
New Jersey

Concerning the Disease **Poliomyelitis**

By Elizabeth Kenny

The purpose of this pamphlet is to bring to the notice of the medical world and the people certain truths concerning the disease, infantile paralysis. For this purpose, I have chosen to present a pictorial history concerning my clinical observations over a thirty-year period that will be easily understood and intensely interesting.

References to the clinical, electromyographical and pathological investigations of these conditions will be found in the Appendix.

The first illustration will be of James Ferguson of Melbourne, Australia. For one year, James was treated for the symptoms and conditions universally acknowledged to be present in this disease throughout the medical world; i.e., accepting the disease to be a virus disease, it is thought that this virus attacks the motor neurons in the central nervous system only, causing damage or destruction to this particular part. This invasion, it is believed, produces the condition of flaccid paralysis in the muscle correlated to the damaged or destroyed motor neurons. Deformities are supposed to be caused by strong normal muscles pulling against the weakened or flaccid muscles.

At the end of one year James was still being immobilized in the Mc-Namara frame, generally used at that time throughout the State of Victoria, Australia. James' widowed mother brought him in his frame approximately 2,000 miles to the City of Brisbane, Queensland, Australia, for Kenny treatment. He was taken out of the frame and treated for the conditions referred to in this pamphlet. These conditions are caused by the virus invading the peripheral structures in certain parts of the body. These peripheral structures are the skin and all underlying tissue, including the connecting and enveloping substance known as the fascia. The myocardium is also affected in some cases, thus proving the disease to be systemic.

It is for these conditions in the peripheral structures that the Kenny treatment has been principally evolved.

However, the application of this treatment, or part of this treatment, without knowledge of what conditions are being treated may not produce the desired results. The reason for this is that the semi-trained technician may not be able to interpret correctly the symptoms in the peripheral structures and therefore fail to give the best possible treatment. It is for the purpose of explaining the theory upon which the Kenny treatment is based (and producing the clinical and scientific evidence concerning this theory) that this pamphlet is being presented for general distribution and for the consideration of the officers of the Children's Bureau of the Federal Security Agency.

This short pictorial history, which could be augmented one-hundred-fold, should be sufficient evidence to establish this newer concept, especially with the clinical, electromyographical, and pathological support presented in the Appendix.

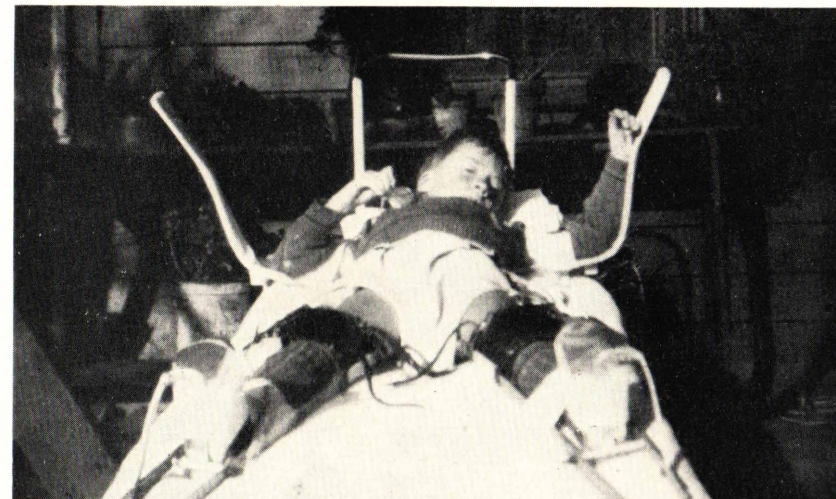


FIGURE 1.

Figure 1 shows James Ferguson in 1938 after twelve months of treatment by orthodox methods for damaged or destroyed motor neurons.



FIGURE 2.

Figure 2 (*right*) shows James in 1939 after one year of Kenny treatment for damaged or disturbed peripheral structures. James at this stage was a student at the Brisbane Boys' Grammar School.



FIGURE 3.

In Figure 3 is presented the next patient, John MacArthur. John was accepted as being one of the most severe cases in the epidemic of 1945, and was treated for six months by what is termed the "modern treatment" for the result of damaged or destroyed motor neurons. In explanation of the term "modern treatment," a certain knowledge of the Kenny treatment is applied, which treatment has not been evolved for damaged or destroyed motor neurons.

It may be noted that John has severe contractions, causing deformities. He is unable to hold his head up or to be pushed into a sitting position, and the condition is still very painful. Compression atrophy is very marked, which means that the skin has not been relaxed and has become shortened. As shown here, John is rapidly becoming a physical wreck.



FIGURE 4.

Figure 4 shows John after six months of treatment at the Elizabeth Kenny Institute in Minneapolis for the damage caused by the virus invading the peripheral structures. John is able to get out of bed, put on his shoes and walk. It will be noted that the contractures and compression atrophy have been successfully combatted.

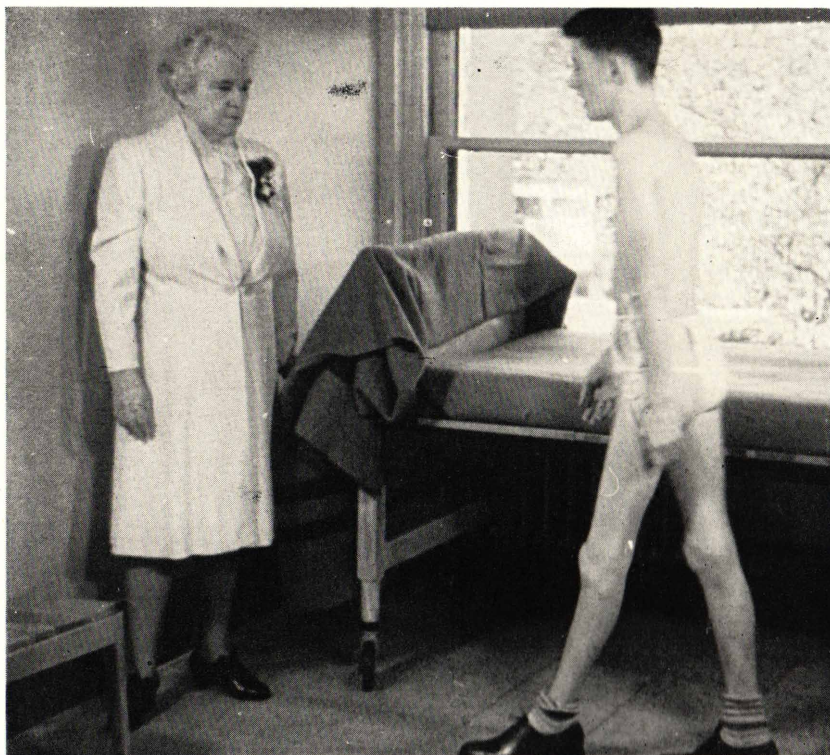


FIGURE 5.

In Figure 5, John is shown walking.

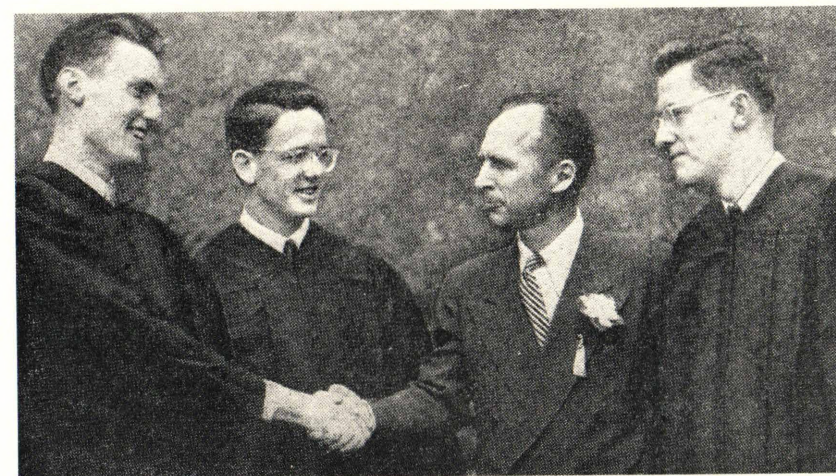


FIGURE 6.

Figure 6 shows John, two years later, receiving the academic award (for contributing most to the school in activities other than athletics) from the faculty of the Nichols School in Buffalo, New York. His father writes as follows:

"... In addition to winning the Faculty Prize, he was president of the Senior Council, vice president of his class, manager of the football team, manager of the tennis team, editor of the *News*, co-editor of the *Verdian* (year book) on the glee club, debating society, et cetera.

"In restoring him physically you also restored him mentally. There is nothing wrong with his morale, that's for sure."



FIGURE 7.

Figure 7 shows the adult patient, Wally Brennecke. He had received sixteen months of the best treatment in the United States for the result of damaged or destroyed motor neurons. He was still unable to sit up, or even to be pushed into a sitting position. Neither could he stand up, and he had bilateral foot drop, despite the application of splints for the prevention of this condition. Wally was transferred to Minneapolis to receive Kenny treatment for the result of the damage caused by the virus in the peripheral structures. At this point he could not feed himself.



FIGURE 8.

Figure 8 shows this same patient, Wally, after receiving fourteen months of treatment at the Elizabeth Kenny Institute at Minneapolis. He is shown here explaining that one week after he left the Institute he obtained a position and has fulfilled it most satisfactorily, recently having obtained a promotion.



FIGURE 9.

Figure 9 presents the patient, Jeannette, aged ten years. She lies with her eyes closed and her head pulled to one side, gasping for breath. At this time, her temperature was 105° , her respiration 68, and her pulse rate 160.



FIGURE 10.

Figure 10 illustrates the fact that any movement of Jeannette produces agonizing pain. The organ of sensation, the skin, is becoming very short and is very painful upon stretching. Jeannette was treated for these previously unknown symptoms and conditions, and was hospitalized for eight months.



FIGURE 11.

Figure 11 shows Jeanette two years later, a healthy, happy, school girl, fully recovered. The medical supervisor of this patient recalled a similar case with identical symptoms four years prior to his contact with Jeanette. His patient, Vernon, was treated for the result of damaged or destroyed motor neurons. Jeannette was treated for damaged or disturbed peripheral structures. Vernon may be seen in Figure 12.



FIGURE 12.

Figure 12 shows the patient, Vernon. Since the architecture of the skin and underlying tissue had never been restored, nor treatment given for damage or disturbance by the virus in this particular part, the end result was the production of a physical wreck.

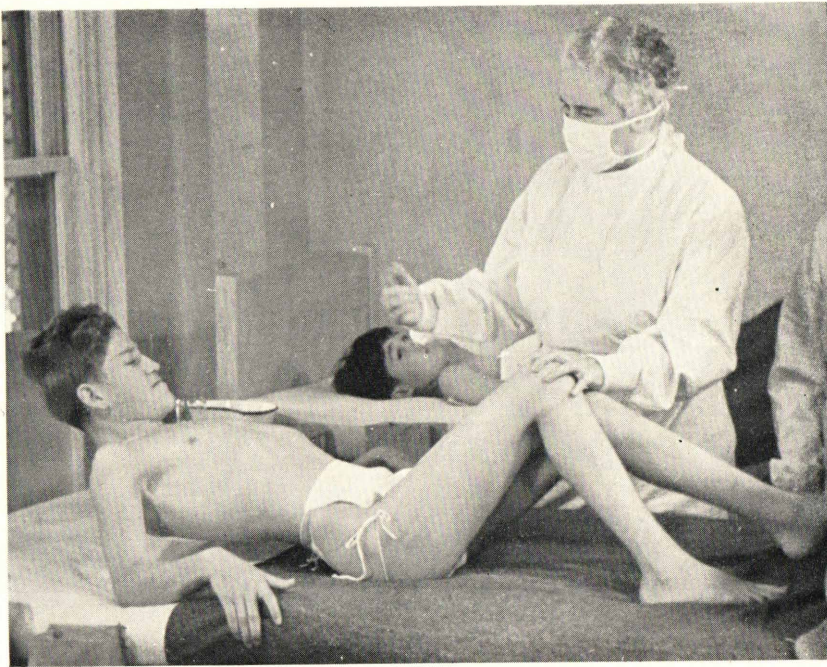


FIGURE 13.

Figure 13 presents Allen in the acute stage of the disease. The disturbance caused by the disease in the peripheral structures and the posterior aspect of the trunk and lower limbs prevent the patient from extending his leg or raising himself into a sitting position. Immediate treatment was given for these conditions.

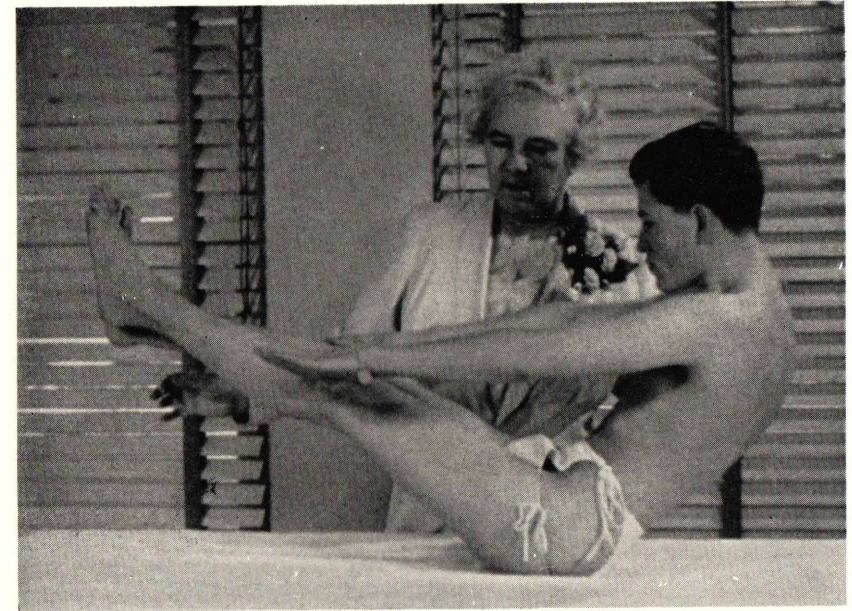


FIGURE 14.

Figure 14 presents Allen two months later, fully recovered and ready for discharge.

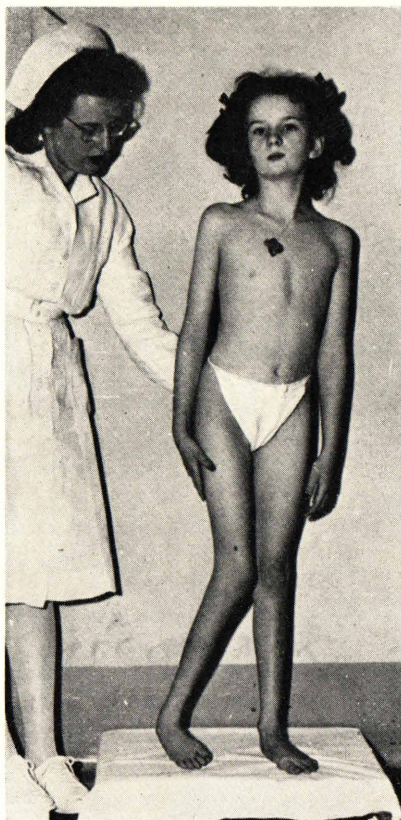


FIGURE 15.

Figure 15 (*left*) is a front view of Mary Walsh, a patient at the Elizabeth Kenny Institute in Minneapolis, from Cork, Ireland, six years after the onset of the disease. The peripheral structures had not been attended. Mary could walk when she first left the hospital, but six years afterwards the deformities prevented her from walking.

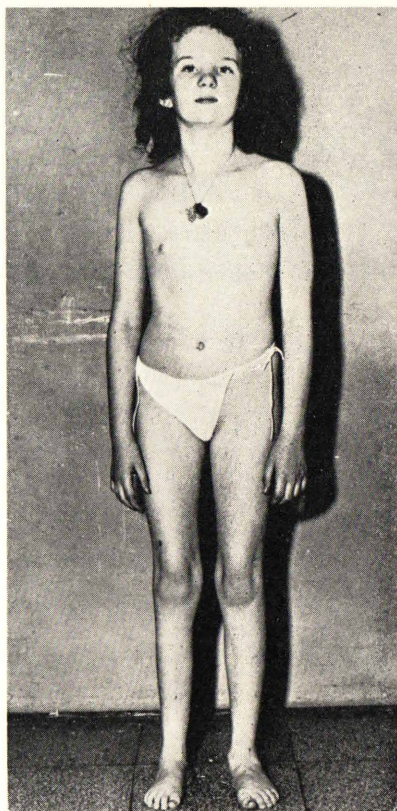


FIGURE 16.



FIGURE 17.

Figure 17 (*left*) shows a back view of Mary before treatment. The deformity in the right lower extremity is preventing her from standing alone or walking.

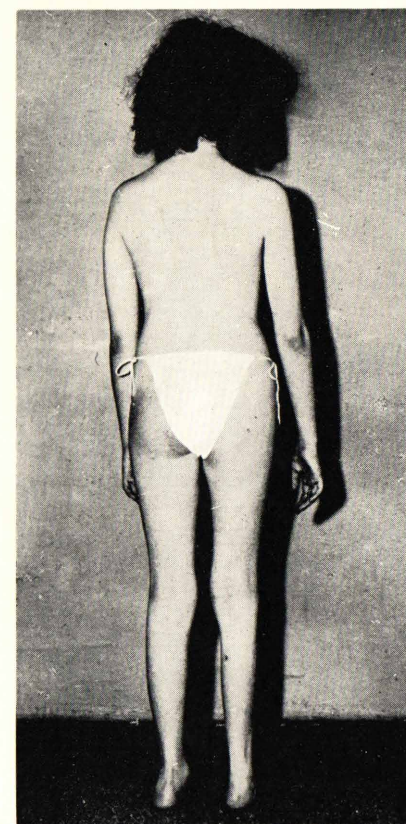


FIGURE 18.

Figure 16 (*right*) shows Mary (front view) after she had received six months of treatment at the Elizabeth Kenny Institute in Minneapolis. The value of this service to the orthopedic surgeon may be estimated by the fact that the orthopedic surgeon in charge of this case was able to bring about the result shown in Figure 16 without the need for a surgical operation.

Figure 18 (*right*) shows the posterior aspect of the same patient after being attended by an orthopedic surgeon without surgery. The orthopedic surgeon received the services of the staff of the Elizabeth Kenny Institute.

Further clinical support was given this work by Dr. John Caughey, medical superintendent of the Auckland General Hospital, New Zealand, who stated that a new conception of the disease, poliomyelitis, had been presented which would stand the test of all time. This statement was made in April, 1948, at a medical conference held concerning the epidemic which had visited New Zealand in 1947 and 1948.



Shown above is Miss Jeannette Truax, who, accompanied by Mrs. V. Horton, both fully trained Kenny technicians from the Elizabeth Kenny Institute in Minneapolis, journeyed to New Zealand at the beginning of 1948 to assist in a severe epidemic which had broken out in that area.

The statement from Dr. Caughey and the testimony from the Board of the Auckland General Hospital proves that a fully trained Kenny technician can go forth with confidence and ability and demonstrate this new concept concerning the invasion of the disease in the peripheral structures.

Concerning this matter, the following letter was received by the Director of the Elizabeth Kenny Institute in Minneapolis:

"On learning that Mrs. V. Horton and Miss J. Truax, Kenny technicians, are now returning to the United States of America following their stay at the Auckland Hospital treating cases of poliomyelitis, my Board at a recent meeting resolved to place on record its appreciation of the very high standard of the services rendered by these two technicians.

"My Board also wishes me to convey its grateful thanks to your Foundation in releasing the technicians for service in Auckland.

"The assistance given by them during the epidemic here was invaluable and appreciated by members of the Board, by the medical staff, and perhaps most of all by the patients themselves.

"I wish you to know that on the eve of their return to the United States they carry with them the best wishes of all those whom they have helped during their sojourn in New Zealand."

This letter was signed by R. F. Galbraith, secretary of the Auckland Hospital Board, Auckland, New Zealand.

The conditions presented in this pamphlet concerning the peripheral structures may be detected very early by a certain procedure. Pamphlets could be prepared describing this said procedure.

Also, during the recent International Poliomyelitis Conference sponsored by the National Foundation for Infantile Paralysis, a question was asked concerning the cause of the materialization of spinal deformities. There was no answer given to this question by any member of the panel or by any delegate. With the knowledge of this disturbance caused by the disease in the peripheral structures, it is possible to prepare a pamphlet describing the cause of the materialization of these deformities, whereby measures can be taken to prevent this materialization.

I should be most happy to prepare these pamphlets, if it is so desired by the officers of the Children's Bureau.

Appendix

Confirmation concerning the disturbance caused by the disease in the peripheral structures has been presented clinically, electromyographically, and pathologically.

Clinically.—A report by Dr. John F. Pohl, consultant orthopedic surgeon at the Elizabeth Kenny Institute in Minneapolis, which appeared in the *Journal of Bone and Joint Surgery*, October, 1947, entitled "The Peripheral Disease of Infantile Paralysis," states:

"The muscle and its enclosing fascia present the most striking evidence of a local process."

Also, in a paper read at the International Conference, by Dr. R. K. Ghormley, senior orthopedic surgeon Mayo Clinic, Rochester, it is stated that the fascia is definitely disturbed by the invasion of the disease.

Dr. Philip Bauwens, chairman of the Department of Physical Medicine of London, England, agreed in a signed statement that the excellent results obtained by the Kenny Method of treatment were obtained by treatment being given for the damage caused by the disease in the peripheral structures.

Many of the most prominent members of the medical profession in the United States have agreed that when Kenny treatment is given, the crippling effects of the disease are greatly reduced. This admission is given irrespective of the fact that the symptoms and conditions for which the treatment has been evolved are not understood; therefore, the treatment cannot be given with the confidence and intelligence necessary to produce the best results.

However, this pictorial pamphlet explains that when the treatment is given intelligently, the end results are very much better. Also, the fully trained technician can with confidence and ability demonstrate the conditions for which the treatment has been evolved.

The medical men referred to include: Drs. Wallace Cole, John F. Pohl, Miland Knapp, and E. J. Huenekens, professors of orthopedic surgery, physical medicine, and pediatrics, respectively, at the University of Minnesota, Minneapolis; Dr. Richard Kovacs, professor of physical medicine, New York, in association with thirty-six colleagues (*Archives of Physical Therapy*, September, 1942); Drs. Kristian Hansson, Philip Moen Stimson, and Harry Gold (book entitled *Cornell Conferences on Therapy*, 1947); Dr. C. E. Irwin, Georgia Warm Springs (*Southern Surgeon*, September, 1942); Dr. Frank Krusen, Mayo Clinic (*Proceedings of the Staff Meeting*

of the Mayo Clinic, August 12, 1942); Dr. Philip Lewin, orthopedic surgeon, Chicago (*Illinois Medical Journal*, 1942), and many others.

Dr. Leon Laruelle of Brussels, Belgium, admitted that much that was unknown in a disease that was so full of unknowns had been presented per medium of this work.

Electromyographically.—A report by the late Dr. Don Gudakunst, medical director of the National Foundation for Infantile Paralysis, supported by Dr. Morris Fishbein, editor of the *Journal of the American Medical Association*, appearing in a book called *The Importance of Research*, stated that the condition of shortening in the peripheral structures had been investigated by Drs. Schwartz and Boehm of the University of Rochester, New York, and it was found, to use their own statements:

"Here was the first real proof that Miss Kenny was treating a condition which actually did exist."

Pathologically.—Dr. Sanz Ibanez, of Cajal Institute, Madrid, Spain, discovered that there were two types of paralysis—one of peripheral origin and the other of central origin. The experiment was carried out per medium of biopsy specimens from the patients themselves and also from animals. Reference to this investigation was published in the *Journal of Bone and Joint Surgery*, October, 1945. This discovery was further supported by the work of the late Dr. E. J. Carey of Marquette University, Milwaukee.

On July 16, 1948, in a magazine known as *Science*, volume 108, it was reported by Gilbert Dalldorf and Grace M. Sickles, Division of Laboratories and Research, New York State Department of Health, Albany, that:

"An additional unusual feature is that paralysis is associated with destructive lesions of the skeletal muscles, the central nervous system being unaffected."

This evidence, associated with the indisputable evidence presented in this picture pamphlet, should convey to those interested the fact that this condition does, in truth, exist, and requires skillful treatment and thorough knowledge of how to restore the architecture of the peripheral structures. This accumulation of evidence entirely contradicts the evidence presented to the Committee on Interstate and Foreign Commerce of the United States House of Representatives, Washington, D. C., by the National Foundation for Infantile Paralysis, May, 1948, wherein it is stated:

"It now seems clear that the direct damage done by the virus is essentially limited to the central nervous system. Nerve cells once destroyed are never replaced.

As a consequence of their destruction, a more or less extensive paralysis immediately sets in, with subsequent muscle atrophy, deformities and disturbance of bone growth."

Further evidence, given by the senior pediatrician associated with the National Foundation for Infantile Paralysis, Dr. Philip Moen Stimson, in his sworn testimony in the case of *McAllister versus Cosmopolitan Shipping Company*, concerning the disease poliomyelitis, in the District Court of New York, February, 1948, was as follows:

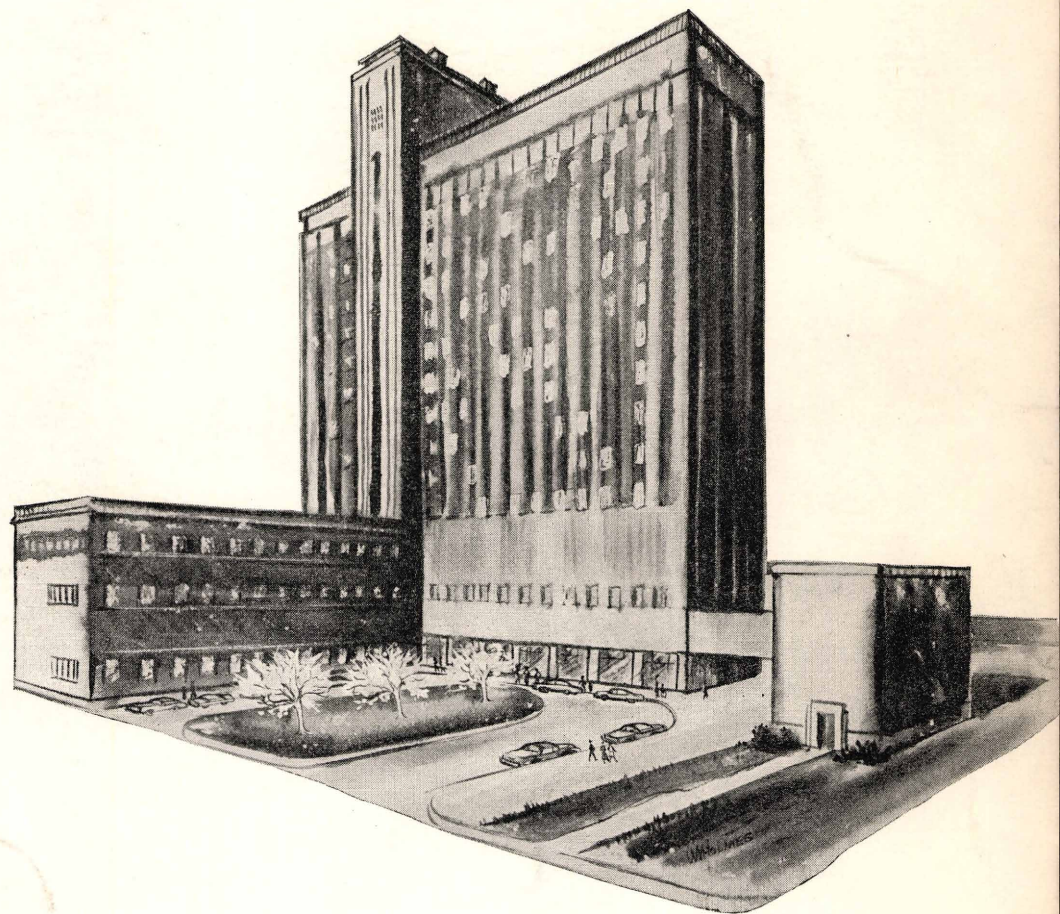
"I would like to state that in the disease when the virus hits us it does not hit primarily in the muscles themselves. The virus, as I understand it, has never been found in the muscle tissue."

The picture story told in this pamphlet, with the clinical, electromyographical, and pathological support, entirely contradicts the theory of the limitation of the damage to the central nervous system and also the idea that the deformities are caused through strong normal muscles pulling against weaker or paralyzed ones.

Furthermore, it is possible to detect the onset of the disease in the peripheral structures, as already stated, by certain procedures. I am willing to prepare a pamphlet describing this for the Children's Bureau of the Federal Security Agency if the officers so desire, and also a pamphlet describing the cause of the materialization of deformities and how to prevent this materialization. This latter subject was left an unanswered problem at the recent International Conference on Poliomyelitis.

Sister Kenny
Queensland Office
Strand
London

Bulletin of the
University of Minnesota Hospitals
and **Minnesota Medical Foundation**



MAYO MEMORIAL DEDICATION

BULLETIN OF THE
UNIVERSITY OF MINNESOTA HOSPITALS
and
MINNESOTA MEDICAL FOUNDATION

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I. THOUGHTS ON MEDICAL EDUCATION AND
THE MEDICAL SCHOOL AFTER TWENTY
FOUR YEARS IN GENERAL PRACTICE

Herman E. Drill, M.D.

Since the days of Hippocrates the science of Medicine has made tremendous advances. Since World War I, through extensive research, supported largely by industry, organized funds for specific projects, and the federal government, new discoveries and new concepts have virtually brought about cataclysmic changes in the various fields of medicine. However, the art of putting all of this know-how into practical use for the benefit of mankind will still depend upon those who have been trained to make use of the armamentaria at their disposal. To insure mankind, then, the greatest benefits from this large fund of medical knowledge, it becomes incumbent upon our medical schools to set up a curriculum of teaching that will prepare its graduates to render the highest quality of service possible to those who come under its care. This indeed could well require the wisdom of Solomon, lest those entrusted with the responsibility of teaching the students of the present and the future set a pattern that eventually could easily deprive the sick of the maximum medical services they are entitled to, both from a technical as well as a sociological point of view. During and since World War II there has been a marked increase in the field of specialization, in fact, to such a degree that many physicians in general practice, at one time, became concerned over the attitude of some of the medical schools faculty in fostering this trend; not so much because they felt that the general practitioner would fade from the medical horizon, but that this attitude might eventually create an untenable problem in dealing with the everyday illnesses requiring medical and surgical attention for which people usually call a general practitioner and not a specialist. In making this statement I do not wish to infer that the general practitioners do not appreciate the need for developing the specialty fields,

but that it not be done at the risk of endangering the future of the entire field of medical practice. Allow me to read to you a portion of the remarks made by Dr. Fount Richardson, delegate from Arkansas, to the Congress of delegates of the American Academy of General Practice at its final session in Cleveland, March 22, 1954. "Today we of American Medicine are standing at the crossroads. In the face of some of the glowing achievements of the sciences, we may be seeing the last days of the practice of medicine as we have known it. No Moses has yet appeared to lead us out of the wilderness. While some of us have slept, the ranks of the family doctor have been thinned, have in some areas been decimated. In some Hospitals one is not allowed to have his family physician. This is true of Cleveland. A few private practitioners of medicine still exist, but in the hospitals in some of our cities a general practitioner cannot take a patient to the hospital, study his condition, and diagnose and treat his case. Incredible? Go out and ask the general practitioners in this city. Is that to happen to all of us? In your town?

"What has been the result of these changes? The only thing that can happen--the patient falls into the hands of the specialist, he becomes a case. He is shunted from specialist to specialist, and his medical expenses increase. No wonder he begins to complain. The American public is long suffering but something has to break. The price of having so many specialists has driven many people into demanding that the Government do something about it. From that, we members of the grand old profession have had to fight for our freedom to practice ethical medicine. We general practitioners in American medicine have stood as a protection against the gougers and fee splitters for five generations. We have directed the medical care of the whole being of our patient and have called in the highly trained technicians, surgeons, radiologists, cardiologists--only when we need them. That is the way it should be.

"The truth is that every patient needs a doctor who can watch the whole course

of his medical care. With what ability could a specialist skilled in orthopedics treat a broken bone, and at the same time watch and care for that patient--if he had at the same time a diabetes, hypertension, and a failing heart?

"Who will be the patient's friend? That's part of the treatment and if you don't believe me, you have a lot to learn. Are we to have six technicians treat a patient when one, broadly educated in the total sciences of medicine can do this effectively? Why should the patient be subjected to six specialists, when his family doctor could do most or all of these things? No wonder medicine is expensive. No wonder a howl of derisive laughter goes up when a radio punster describes a consultation as a case where a wealthy man is ill and a doctor walks in and says, 'Well, well,--here's a sick man with lots of dough--let's call in all our friends.'"

The family doctor has for years protected the patient from such greed, from the ghost surgeon, from the empirical formula that a well-qualified specialist in pediatrics can't treat you if you're over 12 years old.

The truth is that these artificial barriers are all bunk. The truth is that they have pushed the original physician into the background. We, who have cared for the public in a manner which has constantly improved, are told that we may no longer treat our patient, if he is in a hospital.

The truth is that a resentment against these barriers is increasing among the thinking public to the extent that they are eyeing government medicine as the answer. I feel as Mark Anthony, that "judgment has fled to brutish beast and men have lost their reason".

Furthermore, if the various fields of specialization become overcrowded many will find it necessary to resort to general practice to survive economically. In fact, at the present time many surgeons are practicing general medicine, obstetrics, pediatrics, and urology.

They rationalize these procedures by saying that a trained surgeon is an M.D. and hence can do anything. Such inconsistencies are incongruous with their attitude toward the general practitioner who does surgery. For the good of the profession, doctors in general practice must never be permitted to be looked upon as pill peddlers or medical salesmen for the specialists, when in reality they are, and I hope always will be, the first line guardians of all medical practice in this country. Personally, I do not believe that specialty groups in themselves can or want to serve all of the medical needs of the people. It should not be difficult to see that the general practitioner becomes the all important link that integrates all segments of medicine in the minds of the people and he can, if properly trained, be the stabilizing bulwark for the entire profession in the future.

What then can and should be rightfully expected from this group in general practice from the standpoint of types of services to be rendered to the patient? Let's take a frank look at him and try to determine what his capabilities should and can be. Remember, when the student has been graduated and has obtained his license to practice medicine he is going to be called upon to render care to those who elect to engage him. He will be expected to make decisions just like those of you who are teaching students in your teaching hospitals and clinics and those of us who have been in active practice over a period of years. The big difference however now becomes apparent. When your students have finished their required medical curricula, their internships, and have passed the state board examinations, what are they qualified to do? Would it be presumptuous to assume that the answer to this question is largely your responsibility? When he was a student he was taught all of the up-to-date techniques and procedures it was thought necessary for him to learn in the various fields of medicine and surgery. Why? I feel that basically he was taught so he would be able to apply the lessons he learned in the classroom, clinic and hospital, when he would finally go out on his own.

Our great agricultural State is one

whose needs are essentially rural in nature. In the past, the medical requirements and health misfortunes of the majority have been adequately and satisfactorily provided for by the able general practitioner, and he will continue to render service to the majority in the future. It appears therefore that our university, supported in a large measure by tax monies, geared to the needs of the people of the State, and dedicated to serve their best interests, should and MUST consider it to be the primary responsibility of its School of Medicine to stimulate, educate and TRAIN, a large percentage of the students in the general practice of medicine. Our medical school must effect a satisfactory discharge of this educational obligation which will result in sending forth in large numbers, medical evangelists, missionaries and practitioners, eager with desire to apply their new-found skills and training as Men of General Medicine in filling the health requirements of the people of Minnesota, or, in such other areas as they might elect to pursue their profession.

It is my understanding that the majority of graduates (seniors) at the present time indicate that they want to go into general practice. If this is true, then it must follow that our medical teaching must offer a program that will embody what is essentially required to qualify these men and women to do general practice in a manner acceptable not only to the medical school faculty, but also to all other segments of medicine engaged in private practice. If the present program is considered adequate in this respect, is the medical faculty's mental attitude toward general practice positive enough to impart that impression to the student? I have some reason to doubt that it is or has been in some instances after having talked to some interns who have chosen to go into general practice. Likewise it is my opinion that the present curriculum might require some changes to meet the present and future needs of students going into general practice. I have been told by several men interning that the impressions they had gained from some of the doctors on

the faculty was that they do not subscribe to general practice and let it be known in no uncertain terms to the students. I believe that anyone on the medical school faculty who honestly feels that way might be using better judgment if such opinions were withheld unless specifically called for by the student, and then tempered with the knowledge that in most instances the donor of such opinions has himself never engaged in general practice, or for that matter in private practice of any kind. How much do most professors and instructors actually know about what a man in general practice is confronted with from day to day? What can he teach the student about how to approach certain problems he has never had to face himself? Should not a fair amount of time be spent in teaching students how to integrate their knowledge of a given subject with the whole? It therefore seems reasonable to me that teaching standards should be set up which would permit men going into general practice to develop their capabilities to a point where even certain surgical procedures could be taught with a minimal cause of criticism from those who now feel that men in general practice should be entirely restricted from this field. It is easy to lose sight of the large numbers of physicians practicing in rural areas who are regularly called upon to take charge of and handle cases that require no small amount of judgment and self-confidence, as well as immediate action. The past has taught us many things, and one of those things is, that it does not require a board certification in surgery to open an abdomen in order to save a life. Another is, that a doctor exposed to the necessity of doing some surgery in general practice should be thoroughly appraised of what limitations he must place upon himself for whatever procedure he might be inclined to do by choice or necessity. The mark of any good physician is to know when NOT to operate, and I believe that this mark can even be applied to many board certified surgeons. During the past several years there has been a lot of discussion and activity about unnecessary surgery and rightfully so, but, after all, isn't that a matter of individual integrity and judgment? I see nothing that would detract from our high standards of medicine and surgery if the general practitioner were properly trained in carry-

ing out such procedures as appendectomies, tonsillectomies, emergency caesarean sections, hernia repairs, certain orthopedic procedures, hemorrhoidectomies, traumatic repairs and such other commonly encountered conditions requiring the basic knowledge of a surgical approach. To subscribe to such a line of reasoning would certainly require some sound planning and preparation on the part of a medical school teaching staff, together with the co-operation from the various segments of medicine in active private practice. All too well I realize that I have now opened the door for wholesale controversy. However, I only do so to point out to you the immensity of the problem and that to sit back from any particular vantage point and snipe at it will not solve it. Instead of maintaining a smug attitude, or, to follow that still worse insidious method of gradually freezing out the young practitioners from ever being permitted to engage in certain phases of medicine or surgery will not fulfill the obligations that medicine owes the American people. It would be far better to face the problem and see if some acceptable middle ground can be established as a solution to it. Organized medicine in this state has been able to enjoy relative autonomy in the practice of medicine and surgery. Unfortunately this is not true in some of the other states. Should Minnesota ever permit other groups to practice medicine and surgery would the people then be treated to a more acceptable brand of medical care? I maintain that the student who plans to go into general practice should be trained, perhaps not as formally, but nevertheless sufficiently to maintain the prestige of the profession within the ranks of medicine.

In the Sept. 11th issue of the AMA Journal Dr. E. Grey Dimond of Kansas City, Kansas, chairman of the Department of Medicine, University of Kansas School of Medicine, read before the Section on General Practice at the 103rd annual meeting of the American Medical Association in San Francisco, June 23, 1954, a paper entitled "The General Practitioner and the Medical School". He outlines the efforts being made at the University

of Kansas Medical School to develop a program that maintains for the University the great value of the specialties as an administrative framework, as the backbone of residency training, and as a means of maintaining high standards for consultation and referral practice, and concurrently, a program providing a large role for the general practitioner. The methods being used are extramural and intramural preceptorships, post-graduate and circuit courses and the appointment of general practitioners to the fulltime staff. These are not "planned" or "projected", but are major, established functions of the school.

The extramural preceptorship requires all senior students to spend from five to six weeks as preceptees. A panel of general practitioners selected by a committee of the State Medical Society is submitted to the school and from this list suitable preceptors are chosen. Choice of extramural preceptors is restricted to individual practitioners practicing in towns of 2,500 population or less. No other form of preceptorship is permitted inasmuch as this is to be an experience in "pure" family practice. The student assists the doctor in every way but is not permitted to do anything alone or on his own. The preceptorship is given full curriculum status and is not on an elective basis. This apparently adds dignity and stature to its performance. This program provides an opportunity for the physicians in small towns to participate in the teaching of students.

The general practitioners in the urban community of the school conduct the intramural portion of this program and are selected from a panel presented by the Kansas City Academy of General Practice. These men have been assigned the responsibility of staffing the out-patient medicine clinic one morning each week. Senior students are assigned to this clinic. Each student is provided with a small office and examining equipment. The initial history and examination is done by the student and then reviewed by the preceptor. Each preceptor sees approximately five patients of a morning.

As concerns post-graduate instruction

and circuit courses it was pointed out that it is in this area that the medical school of today and tomorrow will make its greatest contribution. Physicians will continue to learn from experience and practice but changing techniques and new knowledge make medicine a fluid and ever changing science.

The route of the circuit courses is chosen each year by a committee from the state medical society, the state board of health, the Academy of General Practice and the school.

It is felt that this program offers definite benefits to students, to the state, to the physician and to the school. Perhaps men going into general practice should be required to take two year internships that could be correlated in such a manner that the necessary fundamental training would be fulfilled to such a degree that every young doctor would be impressed sufficiently as to know what his or her limitations might be. This would be infinitely better than to just hope that the neophyte going into private practice with a one year internship won't attempt to assume responsibilities beyond his capabilities, or that pressure groups from without can control his activities. I am sure that the doctors who have had the good sense and fortune to take two year internships where they have been available have been much better prepared to go into private practice. Not only have they benefited from the added training, but they should also have gained some self-confidence and ability to evaluate their own short-comings, as well as having acquired some stature and poise.

At this point I would like to call your attention to the fact that many men in general practice have not lost sight of what is happening in the field of medicine and have realized like so many of you undoubtedly have, that to practice good medicine today is no small task. Sensing the value of group organization as a means of raising our standards and unifying our position in the ranks of organized medicine led to the formation of the Academy of General Practice in 1946. The movement

was nationwide and at first somewhat loosely bound together because of the existence of several independent groups scattered across the country. Fortunately, men of high caliber in general practice sponsored this movement and through their efforts our present great organization has blossomed into the tower of strength and recognition it is now accorded at a national level. The fundamental philosophy of our Academy is that of better doctors bringing better medical care to all the American people. During the past year when the secretary of health, welfare and education called a meeting in Washington, D.C. on the President's proposed health program, representatives from A.A.G.P. and the A.M.A. were the only two medical organizations invited to send consultants. The house of delegates of the A.A.G.P. establishes the basic policies that each State organization endeavors to follow each year, and assists in crystallizing what the thinking of men in general practice is, in relationship to the various problems that come under discussion at the A.M.A. annual convention. Likewise, the Academy is active in exerting its influence upon the actions taken by other medical groups such as the American Hospital Association. In other words, we are trying to integrate all of our activities with all of the other groups engaged in the practice of medicine and such other medical organizations interested in bringing the best possible medical care and services to the American people. At the present time there are approximately 20,000 members in the A.A.G.P. In the state of Minnesota we now have 476 members. Just a few days ago, on Oct. 20th, we conducted our 4th annual state refresher course at Rochester where the Mayo Clinic group furnished the speakers for our one day program. All doctors of the surrounding states were invited to attend this course. The response to the refresher courses has been beyond all expectations and is fast becoming one of the highlights of medicine in our state. The men in general practice are eager to attend these refreshers, and we hope that in the not too distant future we will have all qualified G.P.'s in the state enrolled as members of this fine organization. As far as I know A.A.G.P. is the only medical body that requires postgraduate study on the

part of its members in order to retain membership. One hundred and fifty hours of such study is required over each three year period. This can be in the form of continuation study courses, organized pathological conferences, convention program attendance, or our own refresher or scientific sectional meetings. In Minnesota we are conducting sectional programs throughout the state to afford the men away from the medical centers the opportunity of meeting in groups of varying numbers to bring to them four or more, but usually four, speakers on subjects covering practically every phase of medicine and surgery. These meetings have so far covered Pediatrics, OB and Gyn., Trauma and Internal Medicine. The meetings are arranged through our executive secretary and the component state groups, of which there are now six. Gentlemen, the G.P. is here to stay, and I trust that all other segments of medicine will unselfishly do everything in their power to make him the stabilizing force of American medical practice. For all specialized segments of medicine to support this movement will not only elevate the standards of the G.P. but will also build stronger ties of unity among all groups.

As a final thought concerning this great medical school and the dedication of the Mayo Memorial building, I would like to make an earnest plea that all of our alumni and the faculty members dedicate themselves individually to the building of a strong medical alumni association. How can this be done? Well, it will require the efforts of many of us to come up with a satisfactory approach. As a loyal alumnus of this institution I have felt for a long time that some positive effort should be made to integrate the inside of our medical school with the outside to the extent that some mutual benefits could accrue to the students, faculty, and the men in practice, by an exchange of ideas that is bound to result in a better understanding for all and to establish that common denominator so essential if we are to remain strong, united, and free. For one who has been closely identified with the medical alumni association for many years and

recently as a member of the board of trustees of the Minnesota Medical Foundation I have been somewhat baffled myself that there exists such a general impression among our alumni that the medical foundation symbolizes an organization created from within the school and not as the combined efforts of our alumni both from within and from without. In all fairness, with reference to the aforemade statement, I must acknowledge that several truly loyal alumni have gone out to several county societies during the past year, in behalf of the foundation, and have presented a program explaining the purpose of the foundation to those present and enlisted the support of their audience by encouraging them to become members of this organization. I believe that every alumnus should be made to feel that he individually has a stake in the foundation and what it is trying to do for his medical school and should therefore give it his wholehearted support. It was Dr. Erling Platou who developed the idea of the foundation and gave it the impetus that brought about its organization. The functioning as separate bodies neither the foundation or the medical alumni association can attain maximum effectiveness without each supporting the other as a solid front.

As a suggestion to assist in breaking down the intangible barrier that seems to exist between those who dwell within and those who live without I would like to propose that a committee be established composed of doctors engaged in private practice together with faculty members. This committee could then form the nucleus of a joint body that could discuss some of the pertinent problems facing our medical school and what could be done to alleviate some of the present inefficiencies and work out plans to improve faculty, student and alumni relationships. It seems obvious to me that our junior and senior students are entitled to some broadminded advice pertaining to the entire field of medicine into which they will shortly be launched. Group meetings with the upper classmen, particularly the seniors, could be held several times during the year to discuss their problems with them and to give them a somewhat broad spectrum view of some of the things they should know about. In this way the

students would establish contacts with men in practice who could answer many of the questions that now go unanswered in the minds of many of these young people. And I am sure that the faculty would come in for its share of questions concerning the many phases and objectives of clinical teaching. Many juniors and seniors now feel stranded between two unknowns. Such a feeling need not exist and every effort should be made to correct it.

I am sure that there are many of you who have other and better ideas of

how we can become stronger members of this great medical family. Anyone with latent or recent ideas on how to accomplish the desired objectives of creating improved medical school teaching and an active, loyal, and co-operative alumni body for this institution is sincerely urged to present his views.

Again I want to thank you for the opportunity to have talked to you and wish to express my gratitude for the privilege of being counted among the medical alumni of the University of Minnesota.

* * *

II. A BRIEF HISTORY OF THE UNIVERSITY OF MINNESOTA HOSPITALS; HOSPITALS REPORT, 1953-54

Ray M. Amberg, Director

The University of Minnesota Hospitals was established to furnish a means for the University of Minnesota to train medical, nursing and other students in the medical auxiliary field in the disciplines of medicine. Training is given in both the out-patient department and hospitals under the direct supervision and guidance of a competent staff made up of full time and part time members. The staff is responsible to the state through the university for both the instruction of the students and the care of the patients. This arrangement has proved satisfactory, not only in the training of students, but also as an economical means for the state to care for many of its indigent sick.

For years the Minneapolis General Hospital and the Ancker Hospital in St. Paul were the principal teaching hospitals of the University of Minnesota, but in 1911, through the generosity of the family of Dr. Adolphus S. Elliot, Elliot Memorial Hospital was erected. This was a general hospital of 200 beds. Since the establishment of Elliot Hospital a service building has been added by the University of Minnesota. The relatives of Dr. Frank C. Todd and other citizens donated funds to build Todd Hospital for the care of ear, eye, nose and throat cases. This unit was opened in 1924. The Citizens Aid Society of Minneapolis contributed funds for the establishment of a cancer institute. Another unit was added to the hospital later which includes the Eustis hospital for children, the Health Service for students, a unit for women--including obstetrical patients--and an out-patient department. A psychiatric unit was provided by the legislature in the year 1937. Together these units make up a series of hospitals known as the University of Minnesota Hospitals and have a rated capacity of 450 patients.

The Variety Club Heart Hospital was

opened to patients during the year 1951, and the first patients with heart disease were admitted on March 18, 1951. The hospital is an integral part of the University of Minnesota Hospitals, and patients are admitted through the Main Hospital Admission Office. Both pediatric and adult patients are given complete physical examinations before referral to the Heart Hospital for special care. Cardiac patients may be treated on an out-patient basis or may be referred to one of the in-patient services. All patients admitted to the Heart Hospital are referred by the family physician in the same manner as other patients referred to the University Hospitals. Approximately eighty patients can be accommodated in the Heart Hospital, and complete in-patient and out-patient services are available including occupational therapy, social service and a patients' library.

The Variety Club Theatre is a part of the Heart Hospital facilities and can be used to show full length movies, and on its completely equipped stage other types of entertainment are offered patients.

The Variety Club Heart Hospital was made possible by funds provided by the Variety Club of the Northwest, the United States Public Health Service and the University of Minnesota. The fourth floor of the Heart Hospital provides facilities for research and study in the causes, prevention and treatment of rheumatic fever and heart diseases, especially those affecting children. This program is sponsored by the American Legion and Women's Auxiliary, Department of Minnesota. The Clark Professorship provides for research in cardiac and cardiovascular diseases as related to the older age groups.

A new child psychiatric unit, eventually to provide patient space for twenty-four patients and an out-patient service, was opened on October 1, 1952. Funds have been provided by the legislature for the operation of this unit on a limited scale, and hopes are strong that a complete unit will be made available for the next biennium.

After several years of planning and

delays due principally to the advance in costs of construction, the Mayo Memorial is now a reality. The Mayo addition provides much needed space for an expanded research and teaching program and also 105 beds as part of the in-patient service. A physical rehabilitation center occupies two floors in the tower of the building. Facilities are available for the School of Public Health, Department of Bacteriology, Department of Continuation Medical Education, and the administrative offices of the dean of the College of Medical Sciences and also several departments of the College of Medical Sciences. With these expanded facilities the University of Minnesota College of Medical Sciences will be able to make a greater contribution to the health needs of the citizens of Minnesota in addition to making its professional contribution to the general field of medicine.

Often the question arises, "Just how large should the University Hospitals be?" The University and the faculty of the College of Medical Sciences are in pretty good agreement that the Hospitals should be large enough to do its job of teaching and investigation and research and--no larger. The Hospitals should have the support of the medical profession in the state so that enough patients are sent to it by physicians in the home communities to assure a well-rounded clinical service in both the in-patient and out-patient as well as the special services.

The University Hospitals assumes the responsibility for providing the clinical laboratory facilities for undergraduate students in medicine, graduate students in medicine, postgraduate students in medicine, graduate students in nursing, undergraduate students in the degree course in nursing, practical nursing, and practical nursing and home-making, undergraduate students in nutrition and dietetics, undergraduate students in physical therapy, occupational therapy, social service, pharmacy, medical technology and others.

The students, over 1200 in number, involved in training programs such as accomplished by the groups listed above re-

quires that there are many contacts with patients that do not usually occur in most hospitals. Because all clinical training is based upon preceptorship ideals and standards, performance of patient care must be of the best. No one would be interested in having a training program in which the best care or the best methods of teaching were not involved.

The University Hospitals presents a great competitive unit for the funds of the state that are available for education. The attitude of the General University is that unless it were for the training program of professional personnel for the care of the sick, they would rather not be in the hospital business. This is easily understandable. The University Hospitals studiously avoids competition with private practice, having the feeling that it is not fair to train a physician to take care of the ill of the state and then unfairly compete with him. The staff, I am sure, is aware of this attitude and cooperates wholeheartedly.

UNIVERSITY OF MINNESOTA HOSPITALS ADMISSION POLICY

In applying for admission to the Hospitals, it is required that the patient be referred by his family physician or by a physician in his local community. This rule avoids the criticism that the Hospitals or its clinics are taking patients away from private practitioners. This same policy holds true for patients admitted to the Variety Club Heart Hospital or any other unit of the Hospitals.

Patients are classified according to their ability to pay as County, Per Diem, Teaching and Research, Sixty Fund, Eustis, Rehabilitation, Multiple Sclerosis, Muscular Dystrophy, Private and, in the case of the Heart Hospital, the Variety Club of the Northwest Fund. There is no distinction made between the various classes in the treatment or privileges afforded.

County patients are those who are totally unable to pay. Their expenses are shared equally by their county and the state. When applying for either out-

patient or hospital care, these patients must present county papers, which are filled in by both their physician and their county commissioner (or his representative).

Per Diem patients are those who cannot afford to pay for the services of both a private physician and a private hospital. When applying for either out-patient or hospital care, these patients must present a special form filled in by themselves and their family physicians. They are required to pay their clinic or hospital expenses only, no charge being made for the professional services of the staff. From the standpoint of money received by the Hospitals, there is no difference between a county patient and a per diem patient; consequently, the services and privileges tendered both are identical.

Teaching and Research patients are primarily destitute unmarried obstetrical patients who are unable to avail themselves of county papers.

The Sixty Fund is a special grant from the state legislature which is used to hospitalize indigent psychiatric patients for treatment, teaching and research purposes.

The Child Psychiatric Fund is a special grant from the state legislature which is used to hospitalize indigent children with psychiatric problems for treatment, teaching and research purposes.

The Eustis Fund was set up by William Henry Eustis to care for indigent children under 16 years of age.

The Rehabilitation Fund is a fund provided by the legislature for the use of the Hospitals, through the Department of Rehabilitation and Physical Medicine, to aid in the physical rehabilitation of patients. Referral by a physician is required.

The Multiple Sclerosis Diagnostic Fund, in the sum of \$10,000, was provided for each year of the past biennium to assist in financing the multiple

sclerosis clinic. Referral by a physician is required. A report of the first year's activity is included in this report.

The Cerebral Palsy Fund.- Funds were provided by the Cerebral Palsy Association of Minnesota to assist in the diagnosis and treatment of people afflicted with cerebral palsy. Referral by a physician is required.

Private patients, limited in number, are admitted as a convenience to the senior staff. They are usually referred cases from other doctors in the state. They are afforded the same treatment and privileges as are private patients in any private hospital.

The Variety Club of the Northwest Fund is a special annual gift from the Variety Club to assist in the care of patients from any of the communities in the Club area which includes Minnesota, North Dakota, South Dakota, parts of Wisconsin or any other area indicated by the Club. Patients may be admitted for care on this fund on the usual recommendation of a physician. The Variety Club itself may at times wish to indicate and request service for certain patients in which they have a special interest, care to be paid for through this fund. No charge will be made for the professional services of the staff--only for clinic or hospital expenses.

Student Health Service patients are not considered as being Hospitals patients even though a Hospitals intern is assigned to that service. The Student Health Service has its hospital quarters in the University Hospitals but is not a part of the University Hospitals. It is a service institution maintained by the University with a director, staff and budget of its own. The new Student Health Service is located on Church Street west of the Hospitals. This provides out-patient care only. The infirmary occupies the fourth floor of the North wing of the Hospitals.

IN-PATIENT DEPARTMENT

The number of patients admitted for the year 1952-53 was 11,866, and for the year

1953-54, the number was 11,836. The total number of days of hospital treatment aggregated 159,764 for 1952-53 and 156,105 for 1953-54. The average number of days per patient stay in the Hospitals was 13.5 in 1952-53 and 13.2 in 1953-54. Deaths for the year numbered 571. Of this number 119 occurred within 48 hours after admission, and 123 were deaths in the Heart Hospital. This is a mortality percentage of 3.8. Post mortems for the year 1952-53 numbered 446, an average of 82% of deaths, and in 1953-54, the number was 443, an average of 82%. I wish to quote a letter received from the American Medical Association dated September 23, 1954: "According to our records, University of Minnesota Hospitals maintained an autopsy record of 79 per cent for the last reporting period. On this basis, it will be included in the list of the twenty nonfederal hospitals with the highest autopsy rate of those approved by the Council for intern training. This list will be published in the Internship and Residency Number of The Journal in the September 25th issue. The efforts of the hospital staff and administration in establishing this record are most commendable. In behalf of the Council, I should like to extend congratulations on your achievement. With every best wish. Signed--Arthur N. Springall, M.D., Ass't. Director, Division of Hospitals and Graduate Education."

The daily average number of patients was 437.7 in 1952-53, and in 1953-54, the number was 427.7. Surgical operations performed during the year 1952-53 aggregated 7,334, and during 1953-54, 8,205, an increase of 871.

OUT-PATIENT DEPARTMENT

The number of new patient visits in 1952-53 was 16,870 and in 1953-54, 16,924. Total patient visits for 1952-53 were 96,962 and for 1953-54, 101,101.

GENERAL REMARKS

The In-Patient service showed a decrease of 3,659 patient days under last year, and the Out-Patient Department

showed an increase of 4,139 visits.

The Psychopathic Department of the Hospitals admitted 302 patients during 1953-54 and 284 in 1952-53. The patients in the Psychopathic Hospital used 10,379 patient days in 1953-54 as against 9,744 in 1952-53.

The waiting list of the Hospitals showed 132 patients on July 1.

In the Out-Patient Department the cost per patient visit was \$4.84 in 1953-54 and \$4.67 in 1952-53, an increase of 17¢ per patient visit. The cost of operating the In-Patient Department was \$24.36 in 1953-54 and \$22.75 in 1952-53, an increase of \$1.61 per patient day.

The X-Ray Department reports 67,696 procedures for the year 1953-54 as against 63,391 for the year 1952-53.

The Department of X-Ray Therapy gave 11,639 deep therapy treatments in 1953-54 as against 9,333 in 1952-53. There were 4,960 treatments given on the Cobalt machine. The number of superficial therapy treatments given in 1953-54 were 918 as against 1,066 in 1952-53. Phillips Contact Therapy treatments numbered 135 in 1953-54 as against 86 in 1952-53. There were 158 radium treatments given in 1953-54 and 165 in 1952-53. The total number of Radon treatments in 1953-54 was 168 as against 143 in 1952-53. In the Isotope Laboratory 781 tracer studies and treatments were given in 1953-54 as against 961 in 1952-53. Phosphorus treatments given this year numbered 44.

The number of hospital prescriptions filled was 146,660 in 1952-53 and in 1953-54 the number increased to 150,606.

The Hospital Laboratory made 578,230 determinations during the year 1953-54 as against 530,846 the previous year.

The Physical Therapy Department reports 20,787 treatments for the year 1953-54 as against 28,493 in 1952-53.

The specific department reports will be presented at the time of their staff meeting assignments.

The Administration of the Hospitals wishes to thank the Variety Club for their support to the Variety Club Heart Hospital; the University Faculty Women's Club who have continued their generous efforts in behalf of our patients; the Crippled Child Relief, the Minnesota Society for Crippled Children and Disabled Adults, the State Division of Social Welfare and the County Welfare Boards for their assistance; the various Nursing Homes for their cooperation; the Traffic Club who year after year continue to provide entertainment, gifts and cheer to our patients at Christmas; the Sunshine Society for their contributions; the Camp Fire Girls; the Girl Scouts; the Needlework Guild, the

Junior League, the Minneapolis Council of Church Women, the Junior Red Cross, the Volunteer Service Bureau, the Alpha Phi Sorority and the many other organizations and individuals who have contributed to the welfare of our patients. We wish to express our sincere appreciation to our corps of Volunteers working at information desks and in patient areas. We wish to thank the many people throughout the state who have contributed to the Heart Fund and the Cancer Fund during the past year. To all members of the professional and service staffs of the Hospitals, the administration wishes to extend the appreciation of the Hospitals for their loyal devotion to duty and considerate care of the patients.

UNIVERSITY OF MINNESOTA HOSPITALS

Statement of Income & Expenditures

June 30, 1954

INCOME

County & State Reimbursement	\$ 1,841,974.18	
Pay Fed	1,562,456.67	
Minnesota Hospital & Home for Crippled Children	55,000.00	
Psychopathic Hospital	241,755.00	
Child Psychiatry	116,678.00	
Out-Patient Department	129,863.22	
Student Health Service	72,918.44	
Variety Club Heart Hospital	25,000.00	
University Funds	164,776.00	
Other Funds	<u>82,724.74</u>	\$ 4,293,146.25

EXPENDITURES

Salaries & Wages	\$ 2,659,904.89	
Supplies & Expense	<u>1,645,013.24</u>	\$ 4,304,918.13

OVERDRAFT (Net) - June 30, 1954 \$ 11,771.88

COST OF OPERATION

Year	Out-Patient Dept.	In-Patient Dept.	Out-Patient Visit	Hospital Day
1946-47	\$ 263,389.11	\$ 1,740,182.00	\$ 3.14	\$ 12.02
1947-48	334,800.00	2,232,041.50	3.72	16.31
1948-49	330,285.63	2,470,630.55	3.43	17.56
1949-50	393,924.24	2,613,295.32	3.82	18.56
1950-51	411,346.29	2,695,796.40	4.09	18.86
1951-52	433,190.27	3,331,177.99	4.35	21.74
1952-53	452,797.47	3,629,971.84	4.67	22.75
1953-54	489,676.01	3,803,470.24	4.84	24.36

COMPARATIVE TWELVE-MONTHS REPORT

IN-PATIENT DEPARTMENT

	1952-53	1953-54		1952-53	1953-54
Total Patients Admitted			Average Days Per Patient (cont'd)		
County (A)	4,392	4,177			
Pay & Per Diem (B,D,F)	5,689	5,845			
Student Health Service	1,090	1,049	Child Psychiatry		28.1
Psychiatry	198	127	Child Psychiatry		
Psychiatry (Pay & Per Diem)	181	174	(Pay & Per Diem)		
Child Psychiatry		77	(B,D)		19.1
Child Psychiatry (Pay & Per Diem)		76	Free	11.1	11.5
Free	125	107	Eustis	16.8	13.9
Eustis	165	178	Variety Club Fund	17.9	10.2
Variety Club Fund	26	26			
	11,866	11,836	Average Length of Stay per Patient	13.5	13.2
Total Patients Treated (Discharged)					
County (A)	4,489	4,339	Daily Average No. of Patients		
Pay & Per Diem (B,D,F)	5,549	5,625	County (A)	216.7	206.6
Student Health Service	1,084	1,054	Pay & Per Diem (B,D,F)	161.2	161.4
Psychiatry	234	162	Student Health Service	11.0	10.4
Psychiatry (Pay & Per Diem)	158	156	Psychiatry	18.6	14.1
Child Psychiatry		84	Psychiatry (Pay & Per Diem) (B,D)	17.6	14.3
Child Psychiatry (Pay & Per Diem)		67	Child Psychiatry		6.0
Free	128	107	Child Psychiatry (Pay & Per Diem) (B,D)		4.0
Eustis	180	194	Free	3.8	3.3
Variety Club Fund	31	30	Eustis	7.6	6.9
	11,853	11,818	Variety Club Fund	1.3	.7
Total Days Hospital Care			Daily Average Census for Hospital	437.7	427.7
County (A)	79,077	75,414			
Pay & Per Diem (B,D,F)	58,850	58,932			
Student Health Service	4,016	3,791			
Psychiatry	6,787	5,157			
Psychiatry (Pay & Per Diem) (B,D)	6,410	5,222			
Child Psychiatry		2,176			
Child Psychiatry (Pay & Per Diem) (B,D)		1,451			
Free	1,392	1,219			
Eustis	2,766	2,477			
Variety Club Fund	466	266			
	159,764	156,105			
Average Days Per Patient					
County (A)	18	18			
Pay & Per Diem (B,D,F)	10.3	10.1			
Student Health Service	3.7	3.6			
Psychiatry	34.3	40.6			
Psychiatry (Pay & Per Diem) (B,D)	30.4	41.4			

COMPARATIVE TWELVE-MONTHS REPORT

IN-PATIENT DEPARTMENT

SERVICE	ADMISSIONS		PATIENT DAYS		AV. LENGTH OF STAY	
	1952-53	1953-54	1952-53	1953-54	1952-53	1953-54
Surgery (inc. general, tumor, reconstruction, chest)	1,748	1,760	24,457	25,518	14	14.5
Urology	825	819	9,524	7,916	10	9.7
Orthopedics	187	207	4,586	4,880	25	23.5
Neurosurgery	<u>398</u>	<u>442</u>	<u>5,833</u>	<u>5,159</u>	15	11.7
Totals	3,158	3,228	43,400	43,473		
Medicine	1,869	1,903	31,079	29,412	17	15.5
Neurology	642	551	10,112	8,276	16	15
Dermatology	<u>133</u>	<u>146</u>	<u>2,877</u>	<u>2,818</u>	22	19.3
Totals	2,644	2,600	44,068	40,506		
Psychiatry	284	302	9,744	10,379	34	34.3
Child Psychiatry	<u>153</u>	<u>163</u>	<u>2,969</u>	<u>3,627</u>	19.4	22.3
Totals	437	465	12,713	14,006		
Ophthalmology	180	170	2,427	2,302	19	13.5
Otolaryngology	<u>205</u>	<u>355</u>	<u>1,397</u>	<u>2,137</u>	7	6
Totals	385	525	3,824	4,439		
Gynecology	951	626	8,893	8,943	9	14.3
Obstetrics	628	742	4,308	4,691	7	6.3
Newborn Pediatrics	501	596	3,654	3,910	8	6.6
Pediatrics & Specialties	1,960	1,924	34,782	32,278	17	16.8
Health Service	<u>1,202</u>	<u>1,130</u>	<u>4,122</u>	<u>3,859</u>	3	3.4
Totals	11,866	11,836	159,764	156,105	13	13.2

COMPARISON OF LENGTH OF STAY

SERVICE	1943-44	1944-45	1945-46	1946-47	1947-48	1948-49	1949-50	1950-51	1951-52	1952-53	1953-54
General Surgery	18.4	18.5	15	14	15	14	14	14	13	14	14.5
Urology	11	12.1	15	13	12	12	11	12	11	10	9.7
Orthopedics	27.5	27.2	31	39	22	28	24	27	25	25	23.5
Neurosurgery	20.1	18	15	16	12	13	12	11	11	15	11.7
Tumor Surgery	11.6	13.9	12	10	12	10	12	Included in Surgery (General)			
Reconstruction											
Surgery	31.1	35.1	29	41	23	19	25				
Chest Surgery	--	--	--	--	--	24	25				
Physical Medicine	--	--	--	--	--	--	--	--	9	--	--
Medicine	16.3	15.5	19	21	18	17	18	21	21	17	15.5
Neurology	14.8	20.4	16	16	17	14	16	17	16	16	15
Dermatology	23.5	14.5	16	18	19	21	21	22	20	22	19.3
Psychiatry	37.3	37.6	31	35	32	29	26	34	30	34	34.3
Child Psychiatry	--	--	--	--	--	--	--	--	--	19	22.3
Ophthalmology	13.5	16.5	16	16	15	15	12	15	14	19	13.5
Otolaryngology	7.2	7.8	8	7	7	8	8	9	8	7	6
Gynecology	11.3	12.7	14	11	11	8	11	8	8)	9	14.3
Tumor Gynecology	37.6	47.4	37	57	35	18	19	11	11)		
Obstetrics	15.8	16.4	15	14	12	11	10	9	8	7	6.3
Newborn Pediatrics	12.6	14.3	13	10	11	9	9	9	8	8	6.6
Pediatric Spec.	24.6	20.6	22	18	16	14	14	16	18	17	16.8
Ambulatory	2.4	--	--	--	--	--	--	--	--	--	--
Health Service	5.2	5.2	4	4	4	4	5	4	4	3	3.4
TOTALS	15.6	16.6	16	15	14	13.2	12.7	13	14	13	13.2

COMPARATIVE TWELVE-MONTHS REPORT

OUT-PATIENT DEPARTMENT

SERVICE	NEW PATIENTS		REVISITS		TOTALS	
	1952-53	1953-54	1952-53	1953-54	1952-53	1953-54
MEDICINE						
General	3,250	3,096	12,496	10,982	15,746	14,078
Allergy		20		342		362
Arthritis		27		1,043		1,070
Cardiac (adult)	454	328	2,171	1,694	2,625	2,022
CMC (Combined Medical Clinic)				111		111
Chest	70	7	338	306	408	313
Diabetes	52	65	1,085	910	1,137	975
Gastro-intestinal	89	11	188	287	277	298
Hematology		7		322		329
Metabolism	29	30	875	744	904	774
DERMATOLOGY & SYPHILOLOGY	459	373	3,447	3,569	3,906	3,942
NEUROLOGY						
General	538	501	1,750	1,210	2,288	1,711
Convulsive Disorder				281		281
Multiple Sclerosis		74		171		245
Parkinson		1		144		145
PSYCHIATRY	277	320	1,879	2,065	2,156	2,385
SURGERY						
General	817	625	4,495	4,310	5,312	4,935
Plastic	72	48	458	457	530	505
Proctology	307	390	715	1,398	1,022	1,788
Tumor	278	258	3,088	3,071	3,366	3,329
Orthopedic	455	345	1,110	1,180	1,565	1,525
Urology-Female	125	195	745	847	870	1,042
Urology-Male	427	313	1,764	1,864	2,191	2,177
Neurosurgery	70	94	537	501	607	595
EYE						
General	852	747	3,732	3,670	4,584	4,417
Refraction			810	841	810	841
Squint	2		303	322	305	322
EAR, NOSE & THROAT	715	721	2,066	2,265	2,781	2,986
Audiology		170		184		354
GYNECOLOGY						
General	439	503	1,600	1,506	2,039	2,009
Gynecology Tumor	82	76	1,234	1,383	1,316	1,459
OBSTETRICS	222	299	1,396	1,479	1,618	1,778
Night Obstetrics	12	10	145	261	157	271
PEDIATRICS						
General	1,069	1,090	4,924	5,025	5,993	6,115
Allergy		20		160		180
Cardiac	455	337	1,314	1,222	1,769	1,559
Convulsive Seizure		38		141		179
Endocrine		5		67		72
Child Psychiatry	23	174	420	362	443	536
Speech	9	60	48	163	57	223
Well Baby		7	301	254	301	261

(Continued on Next Page)

COMPARATIVE TWELVE-MONTHS REPORT

OUT-PATIENT DEPARTMENT

(Continued)

SERVICE	NEW PATIENTS		REVISITS		TOTALS	
	1952-53	1953-54	1952-53	1953-54	1952-53	1953-54
EMERGENCY W-212	2,096	1,923	9,385	9,737	11,481	11,660
NUTRITION	24	337	269	117	293	454
DENTAL	187	93	1,916	2,242	2,103	2,335
POLIO	110	3	307	258	417	261
NORTH	2,749	2,574	12,563	12,645	15,312	15,219
MISCELLANEOUS (Private)		609		2,064		2,673
TOTALS	16,870	16,924	80,092	84,177	96,962	101,101

COMPARATIVE TWELVE-MONTHS REPORT

HOSPITAL LABORATORY

LABORATORY	NUMBER OF DETERMINATIONS	
	1952-53	1953-54
Bacteriology	25,663	24,572
Blood Bank	60,115	90,647
Cancer Detection	27,647	23,575
Chemistry	54,304	53,565
Clerks	17,687	17,369
Dispensary	53,689	56,702
North Clinic	7,348	7,914
Electrocardiography & Basal Metabolism	7,860	7,570
Electroencephalography	776	910
Heart Catheterization	520	426
Heart Hospital	15,446	22,586
Hematology	62,678	66,672
Hematology Special	1,173	1,386
Parasitology - Serology	4,066	4,769
Student Health Service	59,930	69,359
Tissues Specimens	5,478	5,488
Blocks	22,389	26,681
Urinalysis	104,077	98,039
TOTALS	530,846	578,230

COMPARATIVE TWELVE-MONTHS REPORT

NORTH CLINIC

CLINIC ATTENDANCE	NEW PATIENTS		REVISITS		TOTALS	
	1952-53	1953-54	1952-53	1953-54	1952-53	1953-54
Medicine	547	489	1,531	1,568	2,078	2,057
Neurology	243	244	600	813	843	1,057
Dermatology	6	14	64	92	70	106
Surgery	435	435	3,296	3,435	3,731	3,870
Urology	193	200	858	945	1,051	1,145
Neurosurgery	335	343	412	567	747	910
Deep X-Ray	40	81	3	8	43	89
Orthopedic	22	41	31	146	53	187
Physical Medicine	33	29	29	53	62	82
Eye	1	1	9	40	10	41
Ear, Nose & Throat	11	10	28	26	39	36
Obstetrics	183	226	2,107	2,419	2,290	2,645
Gynecology	273	296	1,400	1,656	1,673	1,952
Pediatrics	273	144	740	846	1,013	990
Psychiatry (Child)	8	1	8	2	16	3
Psychiatry (Adult)	6	18	13	28	19	46
Dental	2	3	0	0	2	3
TOTALS	2,611	2,575	11,129	12,644	13,740	15,219

CASH SUMMARY

	<u>1952-53</u>	<u>1953-54</u>
Admissions	8,461.45	9,178.75
Laboratory	20,152.80	21,975.19
X-Ray	1,957.30	1,383.16
Physical Therapy	605.00	594.00
Miscellaneous	1,354.00	1,435.85
Drugs	341.19	444.28
Bandages	90.55	101.20
Treatments	760.75	859.15
	<u>33,723.04</u>	<u>35,972.58</u>

COMPARATIVE TWELVE-MONTHS REPORT

PHARMACY

MONTH	OUT-PATIENT DEPARTMENT, HEALTH SERVICE, HEART HOSPITAL Rx		HOSPITAL Rx (Including Heart Hosp.)		TOTAL Rx	
	1952-53	1953-54	1952-53	1953-54	1952-53	1953-54
July	2,861	3,136	9,315	9,391	12,176	12,527
August	2,772	2,931	10,015	8,920	12,787	11,851
September	2,731	3,010	9,232	8,342	11,964	11,352
October	2,860	3,091	10,226	8,252	13,086	11,343
November	2,252	2,941	8,640	8,957	10,892	11,898
December	2,843	3,049	9,274	8,668	12,117	11,717
January	3,048	2,901	9,902	9,059	12,950	11,960
February	2,579	2,887	8,803	8,855	11,382	11,742
March	3,040	3,778	9,610	10,095	12,650	13,873
April	3,214	3,285	9,255	10,758	12,469	14,043
May	2,960	3,352	9,172	10,019	12,132	13,371
June	3,084	3,450	8,971	11,479	12,055	14,929
TOTALS	34,244	37,811	112,415	112,795	146,660	150,606

COMPARATIVE TWELVE-MONTHS REPORT

OPERATING ROOMS

SERVICE	MAJOR		MINOR		TOTALS	
	1952-53	1953-54	1952-53	1953-54	1952-53	1953-54
<u>Main Operating Room</u>						
General Surgery	865	645	382	451	1,247	1,096
Gastro-Esophageal	212	218	1	1	213	219
Colon	163	194	5	0	168	194
Comb. Abd. Perineostomy	34	43	0	0	34	43
Super Radical Mastectomy	7	17	0	0	7	17
2nd Looks (Misc.)	23	32	0	0	23	32
Cardio-Vascular	178	246	0	22	178	268
Thoracic	76	92	7	4	83	96
Plastic Surgery	45	45	28	34	73	79
Proctology	27	82	39	39	66	121
Neurosurgery	384	381	72	97	456	478
Urology Surgery	192	167	31	62	223	229
Orthopedics	34	25	26	31	60	56
Gynecology	26	29	5	8	31	37
Otolaryngology-Ophthalmology	8	4	39	45	47	49
	<u>2,274</u>	<u>2,220</u>	<u>635</u>	<u>794</u>	<u>2,909</u>	<u>3,014</u>
<u>Cystoscopy Department</u>						
Cystoscopies			1,142	1,239	1,142	1,239
Transurethral Resection & Operative Procedures	389	284	---	---	389	284
Minor Non-Cystoscopies	---	---	403	656	403	656
X-Rays	---	---	648	835	648	835
	<u>389</u>	<u>284</u>	<u>2,193</u>	<u>2,730</u>	<u>2,582</u>	<u>3,014</u>
<u>West Operating Room</u>						
Orthopedics	87	61	95	138	182	199
Casts on Operatives	54	61	85	130	139	191
Fractures	65	34	22	54	87	88
Gynecology	192	211	257	294	449	505
	<u>398</u>	<u>367</u>	<u>459</u>	<u>616</u>	<u>857</u>	<u>983</u>
<u>East Operating Room</u>						
Ophthalmology	196	208	81	86	277	294
Otolaryngology	117	142	438	564	555	706
Dentistry	16	27	29	37	45	64
Plastics	47	94	62	35	109	129
Purple Surgery		1				1
	<u>376</u>	<u>472</u>	<u>610</u>	<u>722</u>	<u>986</u>	<u>1,194</u>
<u>SUMMARY</u>						
Major					3,437	3,343
Minor					<u>3,897</u>	<u>4,862</u>
					7,334	8,205

COMPARATIVE TWELVE-MONTHS REPORT

PHYSICAL THERAPY DEPARTMENT

TYPE OF TREATMENT	NUMBER OF OUT-PATIENT TREATMENTS		NUMBER OF HOSPITAL PT. TREATMENTS		TOTAL NUMBER OF PATIENT TREATMENTS	
	1952-53	1953-54	1952-53	1953-54	1952-53	1953-54
Diathermy (Short Wave)	929	1,611	102	499	1,031	2,110
Ultra Violet	420	350	221	865	641	1,215
Radiant Heat - Infra Red	400	341	578	806	978	1,147
Massage-Muscle Training	1,118	1,891	581	1,328	1,699	3,219
Exercise	3,126	2,839	10,475	6,018	13,601	8,857
Paraffin Bath	154	120	24	95	178	215
Blood Pressure & Hypo	22	31	--	27	22	58
Whirlpool	844	655	862	684	1,706	1,339
Galvanic-Faradic-Sine	241	238	172	216	413	454
Hot Packs	175	103	7,069	938	7,244	1,041
Polio Clinic	392	283	---	---	392	283
Consultations in Clinic	588	849	---	---	588	849
TOTALS	8,409	9,311	20,084	11,476	28,493	20,787
New Patients	293	273	462	327	815	600
No. of Patients Treated	4,086	3,798	12,160	6,436	16,246	10,234

COMPARATIVE TWELVE-MONTHS REPORT

X-RAY REPORT

PARTS EXAMINED	1952-53	1953-54
Abdomen	1,765	1,904
Angiocardiogram	72	87
Angiography	147	189
Ankle and Foot	671	652
Aortogram	81	113
Arm, Forearm, Elbow	480	475
Arteriogram	5	10
Bronchogram	81	100
Chest	15,473	18,021
Cholangiogram	198	206
Colon	3,119	3,695
Cystourethrogram & Cystogram	226	435
Encephalogram	180	256
Facial Bones	211	165
Gall Bladder	642	724
Heart Catheterization	213	199
Heart	2,049	1,986
Hip Nailing	39	23
Hysterosalpingogram	17	42
Miscellaneous	2	--
Pelvimetry	127	117
Pelvis & Hip Joints	2,061	2,064
Planogram	162	334
Pneumoperitoneum		2
Ribs & Sternum	146	158
Isolated Kidney	15	13
Mustard Injection		2
Shoulder Girdle	347	297
Sinuses, Paranasal & Mastoids	395	423
Skull, Orbits, Sella Turcica	1,683	1,790
Small Bowel	162	147
Spine	2,378	2,722
Spinogram	154	177
Stomach, Duodenum, Esophagus	5,504	5,568
Spleenogram	---	1
Thigh, Leg, Knee	1,105	1,095
Urinary Tract	820	893
Urography, Excretion	1,226	1,301
Urography, Retrograde	321	411
Venacavagram	3	3
Venogram	36	26
Ventriculogram	56	77
Wrist & Hand	588	641
TOTAL RADIOGRAPHIC EXAMINATIONS	42,960	47,544
<u>PHOTOFLUOROGRAPHY</u>		
Students Health Service		
Employees	1,454	1,549
Admission Cases	6,893	5,965
	8,347	7,514

(Cont'd.)

COMPARATIVE TWELVE-MONTHS REPORT

X-RAY REPORT (Cont'd)

PARTS EXAMINED	1952-53	1953-54
<u>FLUOROSCOPY</u>		
Out-Patient Routine	349	---
Diagnostic	<u>11,735</u>	<u>12,638</u>
	12,084	12,638
<u>TOTAL DEPARTMENTAL PROCEDURES</u>	63,391	67,696
FILMS USED	127,680	145,890
<u>PATIENTS</u>		
Cancer Detection Center	4,631	5,435
Hospital	11,246	11,550
Variety Club Heart Hospital	3,859	4,293
Out-Patient Department	<u>10,775</u>	<u>11,903</u>
	30,511*	33,181*
Students Health Service*	769	1,046
Private*	4,421	6,266
Miscellaneous*	566	956
*Included in "Total Patients"		

COMPARATIVE TWELVE-MONTHS REPORT
X-RAY THERAPY DEPARTMENT

TYPE OF TREATMENT	1952-53	1953-54
<u>Deep X-Ray Treatments</u>		
New Patients Treated	470	629
Patients Retreated		190
TOTAL NUMBER OF PATIENTS TREATED	653	774
Hennepin County Patients	105	116
Ramsey County Patients	41	30
TOTAL COUNTY PATIENTS	309	319
Out-Patient Treatments	4,446	6,980
House-Patient Treatments	4,887	4,659
TOTAL NUMBER OF TREATMENTS	9,333	11,639
Average No. Treatments per Patient	14.4	15.0
No. Treatments on 250 Machine		3,902
No. Treatments on 400 Machine		2,777
No. Treatments on Cobalt Machine		4,960
<u>Superficial X-Ray Treatments</u>		
140 KV	219	177
Out-Patient Treatments	1,021	911
House-Patient Treatments	45	7
TOTAL NUMBER OF TREATMENTS	1,066	918
<u>Phillips Contact Therapy</u>	86	135
<u>Radium</u>		
Total Number of Treatments	165	158
New Patients Treated	145	137
<u>Radon</u>		
Total Number of Treatments	143	168
New Patients Treated	24	28
<u>Isotope Laboratory Report</u>		
Total Number Tracer Studies & Treatments	961	781
Number New Patients Given Tracer Study	742	592
Number Patients Given Repeat Tracer Study	160	125
Number New Patients Given Treatment	48	54
Number Patients Given Retreatment	59	64
<u>Total Number Millicuries</u>	650	487.5
<u>Phosphorus Report</u>		
Total Number Treatments		44
Number New Patients Given Treatment		21
Number Retreatments		23

COMPARATIVE TWELVE-MONTHS REPORT

WAITING LIST

SERVICE	1949-50	1950-51	1951-52	1952-53	1953-54
Male Surgery	20	46	18	14	21
Female Surgery	26	39	11	18	14
Neurosurgery	2	4	2	6	5
White Surgery	3	0	0	0	0
Plastic Surgery	8	3	0	0	1
Purple Surgery	12	0	0	0	0
Yellow Surgery	7	0	0	0	0
Blue Surgery	4	0	0	0	0
Urology	34	37	28	5	10
Tumor	0	8	2	0	1
Orthopedic Pediatrics	7	12	3	2	5
Reconstruction Pediatrics	0	0	3	1	1
Surgery Pediatrics	4	1	0	0	0
Urology Pediatrics	0	1	3	0	0
Orthopedics	14	14	17	23	24
Chest	1	0	0	0	0
Medicine	12	12	1	4	3
Medicine (Pediatrics)	0	0	1	1	0
Neurology	105	47	30	32	11
Neurology (Pediatrics)	1	1	1	0	0
Psychiatry	12	11	7	21	13
Psychiatry (Pediatrics)	3	0	0	14	11
Dermatology	0	15	24	6	7
Pediatrics	6	1	0	0	0
Ophthalmology	0	0	0	0	0
Ophthalmology (Pediatrics)	0	0	0	2	2
Tonsils & Adenoids	0	0	1	0	0
Physical Medicine (adult)	0	0	0	2	3
TOTALS	281	252	152	151	132

MEDICAL RECORD DEPARTMENT

(I). Chart Service

A gradual increase in the services rendered by the record department during the past three years is illustrated in the following table:

	<u>1951-1952</u>	<u>1952-1953</u>	<u>1953-1954</u>
Charting: Lab., X-ray and misc. reports	22,230*	80,687	102,631
Number of Insurance Reports completed	3,821	4,616	5,063**
Number of Charts pulled for studies	17,550	25,538	26,046
OPD charts pulled including clinic visits and fails	112,102	108,129	112,458

* This figure may not have included duplicate handling of reports because of missing or incorrect hospital numbers.

** This figure includes only those requests for insurance information which came to the department from bookkeeping. There were an additional estimated 200 requests which came to us from sources other than bookkeeping.

- - -

(II). Research Projects

This year 26,046 charts were pulled for studies and follow-up compared to 25,538 in 1952-53. Of this number 82 studies were completed, 16 temporarily discontinued, and one continued on a long-time basis. The number of diagnoses for each study varied from two to two-hundred fifty-six. Master lists were made up for each study to avoid duplication in pulling charts. These master lists together with the work sheets which are filed in the doctors' folders often prove of great value in other studies. Many of the study charts are still being returned to the record department by hospital messenger without being properly labeled. This causes extra work since chart numbers on master lists must be checked off upon return of the chart.

some much needed filing space. The new Mayo Memorial record area will be equipped entirely with similar shelving.

(IV). Review of Revised Procedures

A. Insurance

Briefly, the revision in the method of handling insurance forms as described in last year's annual report included the following:

1. Using standard short forms for reporting.
2. Limiting the duties of the insurance clerk to insurance and correspondence.
3. Obtaining final diagnoses upon discharge of the patient.

A year of experience under this revision has fully justified the change. At no time has the number of incomplete insurance reports exceed ten. There is just one improvement that is to be desired. The majority of charts are still coming to the department without final

(III). New Equipment

Approximately 105 conventional 5-drawer files were replaced by 62 units of Remington Rand shelving during the fall of 1953. This arrangement gave us

diagnoses. Because of this the insurance clerk finds it necessary to spend some time each day contacting doctors by phone so that she can keep the reports going out regularly.

B. Indexing

Although it is two years since we discontinued IBM and adopted the Cardineer method of indexing diseases and operations, it should be mentioned that we are happy with the change for three reasons. First, we are able to keep our indexing current and up-to-date; second, our file is more compact; and third, chart numbers are immediately available for case studies.

(V). Professional Activities of Medical Record Librarians

Both Miss Carlson and Miss Pfenninger have participated in professional activities outside the department.

During the year 1953-1954 Miss Carlson served as president of the Twin Cities Chapter of Medical Record Librarians. In October of 1953 she attended the National Convention of the American Association of Medical Record Librarians as a delegate from Minnesota. She also served as the chairman of the nominating committee for the state association. For the second time Miss Carlson served as chairman of the committee of record librarians who in conjunction with the University Extension Service, the Minnesota Hospital Association and the Minnesota Department of

Health presented a short course in anatomy and medical terminology. Drs. Thomson and Cornwell again served as faculty. In addition, Miss Carlson talked on medical records to students from the schools of Hospital Administration and Physical Medicine.

At the annual meeting in May Miss Pfenninger was elected president-elect of the Minnesota Association of Medical Record Librarians. During the past two years she has served as chairman of the publicity and recruitment committees of the Minnesota Association. In October of 1953 Miss Pfenninger participated in an institute for nurses which was presented at the University Continuation Center. She discussed medical records as part of the institute theme on "Streamlining Reporting to Improve Administration". During the past year the Minnesota Department of Health together with the Minnesota Hospital Association and the Minnesota Association of Medical Record Librarians presented three institutes for medical record personnel in three different areas of the state, namely, Breckenridge, Mankato and Duluth. Miss Pfenninger taught a four-hour course in medical terminology at each of these institutes. Within the hospital she also talked on medical records to students of pharmacy and post-graduate nursing.

Respectfully submitted,

Bertha Pfenninger, R.R.L.
Principal Medical
Record Librarian

ANNUAL REPORT - July 1, 1953 - June 30, 1954
RAW FOOD COSTS

DIETARY DEPARTMENT

	July	August	September	October	November	December
Patients	13,663.80	13,091.74	12,125.89	13,379.30	13,279.59	13,207.65
House	9,606.06	8,840.83	8,310.72	9,837.79	9,031.26	9,567.77
Total	23,269.86	21,932.57	20,436.61	23,217.09	22,310.85	22,775.42

MEALS SERVED

Patients	38,752	35,701	36,298	39,644	39,797	37,810
House	30,577	27,393	24,573	28,486	29,307	29,069
Total	69,329	63,094	60,871	68,230	69,104	66,879

DISTRIBUTION OF RAW FOOD
DOLLAR IN PERCENTAGE

Patients

Staples	1.7%	1.6%	1.5%	1.6%	1.5%	1.7%
General Diets	31.2	21.7	21.4	31.4	32.8	30.5
Sp. Diet Lab.	18.3	17.6	18.0	16.0	16.0	16.3
Milk Lab.	1.2	1.2	1.0	1.2	1.2	0.9
Floor Orders	6.3	7.2	7.3	7.4	7.9	7.5
Parties	0.1	0.2	0.2	0.1	0.2	1.0
Totals	58.8%	49.5%	49.4%	57.7%	59.6%	57.9%

House

Nurses-Interns	40.5	39.4	39.9	40.9	38.9	40.8
Op. Rm. Nour.	0.7	0.9	0.7	0.6	0.6	0.8
Staff Lunch	--	0.2	--	0.8	0.9	0.5
Party	--	--	--	--	--	--
Total	41.2	40.5	40.6	42.3	40.4	42.1
GRAND TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Per Capita Cost

Patients Per Day	1.056	1.098	1.002	1.014	0.999	1.050
Patients Per Meal	0.352	0.366	0.334	0.338	0.333	0.350
House Per Day	0.942	0.963	1.014	1.032	0.924	0.987
House Per Meal	0.314	0.321	0.338	0.344	0.308	0.329

Raw Food Classification (%)

Meat, Cheese, Eggs	39.9%	41.7%	39.1%	40.9%	41.2%	40.3%
Canned Goods,						
Fruit, Veg.	23.5	24.1	23.3	22.5	22.8	21.4
Milk & Cream	18.2	18.5	18.7	18.8	20.1	19.8
Fat & Oil	3.9	1.9	4.2	3.5	1.4	3.1
Miscellaneous	14.5	13.8	14.7	14.3	14.5	15.4
GRAND TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Dietary Department (Cont'd.)

January	February	March	April	May	June	Totals	Averages	Percentages
13,573.32	12,403.50	13,369.20	13,792.64	13,741.27	13,351.70	158,979.60	13,249.97	57.8
9,937.69	9,396.21	9,939.60	10,591.51	10,852.06	10,306.41	116,217.91	9,684.99	42.2
23,411.01	21,799.71	23,308.80	24,384.15	24,593.33	23,658.11	275,197.51	22,934.96	100.0%
39,117	36,814	41,543	39,351	41,536	40,007	466,370	38,864	57.0
30,794	27,357	32,023	31,625	32,081	30,228	353,613	29,384	43.0
69,911	64,171	73,566	70,976	73,617	70,235	819,983	68,248	100.0%
1.6%	1.5%	1.6%	1.4%	1.3%	1.4%	4,250.56	1.6	
32.8	31.6	30.0	32.3	31.3	30.9	86,548.00	31.5	
15.7	15.4	17.0	14.4	16.2	16.8	45,339.03	16.5	
0.8	0.8	0.9	1.3	1.1	1.4	2,978.11	1.1	
6.8	7.6	7.8	7.1	5.9	5.8	19,307.85	7.0	
--	--	--	--	--	--	556.05	--	
57.7%	56.9%	57.3%	56.5%	55.8%	56.3%	158,979.60	57.7	
40.5	41.8	41.0	42.0	42.5	42.6	112,606.34	41.0	
0.8	0.6	0.8	0.6	0.7	0.7	1,912.23	0.7	
1.0	0.7	0.9	0.9	1.0	0.4	1,689.34	0.6	
-	-	-	-	-	-	10.00	-	
42.3%	43.1%	42.7%	43.5%	44.2%	43.7%	116,217.91	42.3%	
100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	275,197.51	100.0%	
1.041	1.011	0.966	1.053	0.993	1.002		1.023	
0.347	0.337	0.322	0.351	0.331	0.334		0.341	
0.966	1.029	0.930	1.002	1.017	1.023		0.987	
0.322	0.343	0.310	0.334	0.339	0.341		0.329	
38.4%	40.3%	39.0%	39.1%	40.2%	40.5%	110,103.99	40.1%	
22.0	21.9	24.0	23.2	23.0	25.2	63,535.97	23.1	
19.9	19.8	19.7	18.2	18.3	17.3	52,098.58	18.9	
5.0	3.4	1.4	4.7	2.8	1.9	8,575.96	3.1	
14.7	14.6	15.9	14.8	15.7	15.1	40,873.01	14.8	
100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	275,197.51	100.0%	

SOCIAL SERVICE DEPARTMENT

Statistical Report

7-1-53 -- 6-30-54

Total Number of Cases Handled by the Department	7,164
Medical Social Service Cases	6,013
Psychiatric Social Service Cases	1,151

Classification of Cases

	<u>Medical</u>	<u>Psychiatric</u>
Recorded	1,079	1,151
Summarized	4,934	
Courtesy	2,488	

Staff

Total	17
Director	1
Supervisors	2
Medical Social Workers	9
Psychiatric Social Workers	5
Clerical	2 $\frac{1}{2}$

Students

Medical Social Work	2
Psychiatric Social Work	6

TYPES AND FREQUENCY OF DISEASES TREATED IN OCCUPATIONAL THERAPY

July 1, 1953 - June 30, 1954

CARDIAC AND CIRCULATORY CONDITIONS

Anemia	30
Arteriosclerosis	34
Blood Dyscrosis	10
Carditis	74
Congenital Heart Disease	106
Hematoma	14
Hemophilia	71
Hodgkin's Disease	48
Infectious Diseases	8
Leukemia	72
Lymphosarcoma	8
Myocarditis	22
Rheumatic Heart Disease	991
Thrombophlebitis	31
Heart Failure	135
Thrombosis	23
Mytral Stenosis	31
Reserved	62

DERMATOLOGICAL

Burns	127
Dermatomyocitis	17
Eczema	52
Lupus Erythematosus	134
Plastic Repair	84
Skin Lesions	87

EYE-EAR-NOSE-THROAT-RESPIRATORY

Asthma	38
Blindness	21
Cleft Palate	22
Ear Surgery (Injury)	34
Esophagus Repair	8
Eye Surgery (Injury)	34
Infectious Diseases	3
Malignancy	26
Otitis Media	6
Tonsils and Adenoids	11
Tuberculosis	24
Strabismus	22
Reserved	24

GASTRO-INTESTINAL-UROLOGICAL

Bladder	37
Cancer	130
Coelian Disease	86
Cirrhosis	35
Congenital Malformations	48
Cyst	33
Diabetes	163
Digestive Disturbances	39
Endocrine Disturbances	41
Glomerulo-Nephritis	119

GASTRO-INTESTINAL-UROLOGICAL (Cont'd)

Hepatitis	14
Herniotomy	41
Kidney, Lesions, Stone, Surgery	80
Nephrosis	23
Nephritis	140
Splenectomy	2
Tumor	42
Ulcer	13
Ulcerative Colitis	14
Reserved	205

NEUROLOGICAL CONDITIONS

Ataxia	35
Brain Tumor	63
C.V.A.	46
Cerebral Palsy	21
Drugs, Heavy Metal Poisoning	95
Encephalitis	20
Guillian-Barre's Diseases	80
Hemiplegia	209
Head Injury	12
Multiple Sclerosis	49
Muscular Dystrophy	42
Parkinsons Disease	63
Paraplegic	102
Peripheral Nerve Injuries	19
Peripheral Neuritis	4
Polio	261
Seizures, Epilepsy	123
Spinal Cord Disease	44
Sydenham's Chorea	54
Quadraplegia	139
Venereal	16
Reserved	66

ORTHOPEDIC CONDITIONS

Amputations	49
Arthritis	343
Orthoplasty	63
Congenital Malformations	50
Fractures	204
Lacerations	17
Laminectomy	6
Osteomyelitis	1
Slipped Epiphysis	5
Spina Bifida	2
Reserved	65

PSYCHIATRIC CONDITIONS

Alcoholism	10
Evaluations & Observation	6,763
Hydrocephalus	5
Mental Retardation	3
Psychoneurosis	3
Reserved	25
TOTAL	13,026

STATIONS FROM WHICH PATIENTS WERE REFERRED TO OCCUPATIONAL THERAPY

July 1, 1953 - June 30, 1954

<u>Department</u>	<u>Station</u>	<u>Number of Referrals</u>
Medicine (General)	30	21
"	31	24
"	32	23
Medicine (Urology)	40	1
"	41	2
"	42	2
Neurology	50	23
Obstetrics	54	3
Orthopedics	44	20
Out-Patient Department		27
Pediatrics (Isolation)	33	40
"	43	98
"	53	205
Psychiatry	60-61	6,458
"	64	105
Surgery	21	9
"	22	12
Heart Hospital		185
Orthopedics	46	8
TOTAL		7,266

TOTAL NUMBER TREATMENTS - REFERRING PHYSICIANS

July 1, 1953 - June 30, 1954

Total number of in-hospital treatments	13,746
Total number of out-patient treatments	1,730
Total number of Heart Hospital treatments	5,233
TOTAL	17,794

Total Number of Referring Physicians

Psychiatric	37
Heart Hospital	27
GMS/Physical Disabilities	49
TOTAL	113

The Multiple Sclerosis Clinic was opened under the auspices of the Division of Neurology on July 1, 1953 with Dr. Charles Van Buskirk as chief of service and Dr. A. B. Baker as director. When Dr. Van Buskirk left, Dr. Gene Lasater was appointed chief of service. The chief functions of the clinic were designed as follows:

(1) Diagnostic. The Division of Neurology has for a long time been impressed with the fact that a sizeable number of patients who carry the diagnosis of multiple sclerosis are actually suffering from some other disease. One of the chief purposes of this clinic was the detection of these cases so that treatment appropriate to their disease may be instituted.

(2) Therapeutic. All patients were to be placed on a therapeutic regime and followed either in the Multiple Sclerosis Clinic or by their own local physician. The evaluation of new therapeutic agents is one of the prime functions of the clinic.

(3) Research. The collection and active follow-up of a large group of cases of multiple sclerosis will make available to us an abundance of material for clinical research in this disease.

The following is a summary of the activities of the Multiple Sclerosis Clinic from July 1, 1953 to September 1, 1954.

During the first 14 months of operation, 166 patients have been examined. Of these 102 were initially seen as outpatients and 64 were first encountered on the Inpatient Neurology Service. Of the 102 outpatients, 20 were subsequently admitted to the hospital for special diagnostic or therapeutic procedures.

The diagnosis of Multiple Sclerosis was confirmed in 119 (72%) of the 166 patients. Eighty (80) of these were female and 39 were males; a ratio of 2 to 1. The average age of the multiple sclerosis patient at the time of his initial clinic visit was 40 years, and

the average age at the onset of the disease was 30 years. This means that during the first year we have been seeing a group of patients who have had their disease on the average of 10 years. It is anticipated that a greater percentage of earlier cases will be seen in the future.

A total of 270 outpatient visits are recorded for the clinic. The follow-ups are largely confined to those patients in whom the diagnosis of multiple sclerosis was confirmed.

The following table lists the types of medication being used at the present time and the number of patients who have received or are receiving each type:

THERAPY FOR MULTIPLE SCLEROSIS PATIENTS

Low Fat diet	-	34
ACTH	-	13
Histamine	-	23
Liver	-	12
Vitamin B ₁₂	-	22
Niacin	-	78
Benedryl	-	17
Quinine	-	11
Tolserol	-	14
Vitamin B ₁	-	11
Bal	-	17
My-B-Den	-	4
Thyroid	-	1
Banthine	-	7
Brewer's Yeast	-	1
Furmethide	-	1
Dramamine	-	1
Rabellon	-	1
Pancreatic extract	-	1
Vitamin C	-	2
Dilatin	-	1
Mebaral	-	2

We are planning in the future to evaluate several new therapeutic agents which have recently been reported to be of value in the treatment of multiple sclerosis. At present we are communicating with Sharpe and Dohme in an effort to obtain a supply of an insulin-free pancreatic extract (Depropanex) for the treatment of 25 patients. This medication was recently reported to be of considerable value in the alleviation of symptoms in multiple sclerosis but has not been evaluated in a sufficiently large number of

cases. We would also like to see what effect, if any, the drug has on the prevention of exacerbations of symptoms.

In addition to trying the various treatments suggested for this illness, we hope now to begin to try to find some laboratory procedures which will make the diagnosis of this illness somewhat more specific and more reliable. The attempt to find such a laboratory procedure may be very difficult and will require extensive studies and investigations.

SUMMARY: It is our feeling that this clinic has been very successful to date. It is to be pointed out that

during the time that this clinic has functioned 29 per cent of the patients referred here with a diagnosis of multiple sclerosis have proven to have some other condition, many of these patients having conditions which at the present time can be treated. In a large number of these patients treatment has been recommended, and in many of these cases, complete recovery has resulted. It is important that we continue such a service and continue to discover these cases.

In addition, it is important that further attempts be made to find a better method for diagnosis and a better method for treatment of these individuals.

* * *

III.

-- MORE THAN STONE OR STEEL --

Few things can match the thrill of moving into a new building. Freshly painted plaster, gleaming tile, new equipment, and the pleasing but not quite familiar scenes visible through newly-placed window-glass combine to produce an effect which stirs even the most unimaginative. If, in addition to displaying these superficial attributes common to all new structures, the building is one which will be devoted exclusively to the study of man's ills and to attempts to alleviate them, the thrill is enhanced immeasurably. Such a building is the Mayo Memorial of the University of Minnesota Medical Center.

Dr. William J. Mayo and Dr. Charles H. Mayo were two of Minnesota's most distinguished sons. The fact that an internationally renowned clinic arose, under their guidance, in a town of modest size on the plains of the Upper Midwest more than adequately testifies to their greatness and to their vision. What was the source of their greatness? Certainly others of their day equalled them in technical skill, and we cannot account for their position in American medicine solely on the basis of their mastery of surgical technic. We must seek, in addition, other characteristics. First among these, perhaps, was their early and continuing awareness of the dynamic nature of medicine. They fully understood that its everchanging nature requires constant application, constant study. To this concept they paid no mere lip service; frequent travels took them to other centers where promising new techniques could be observed and learned. Those of value were soon adapted to their own practice.

As their practice grew and they required more help, another important characteristic became increasingly apparent -- their ability to select associates of the highest caliber. The choices were based on a simple concept: choose the best men available. The result was that the Mayo Clinic gained the services of such men as Plummer, Balfour, Walters, Wilder, Judd, and Adson, to mention only a few. Perhaps, however, the impact of the Mayo brothers on American medicine will be mainly judged in the light of their lifelong interest in and support of medical education and research. Their immutable belief that research is the elan vital of medical practice was paralleled only by their equally firm conviction that young men and women of talent should be given every opportunity to develop their full potentials. The Mayo Foundation, which supports graduate education and research in Rochester, was the natural outgrowth of these views.

In 1939 the Doctors Mayo died, just a few months apart. Shortly thereafter Harold E. Stassen, Minnesota's governor at that time, appointed a Mayo Memorial Commission, a group of distinguished citizens, charging them with the responsibility of determining the most appropriate means of honoring the illustrious pair. After considering many projects, members of the Commission agreed that the most fitting memorial would be a medical center for teaching and research to be erected on the campus of the University of Minnesota Medical School to which the Mayo brothers had devoted so much time, interest, and money during their lifetime.

Later the Legislature of the State of Minnesota unanimously resolved to participate in the Memorial and authorized the appointment of a Committee of Founders. Funds were raised by public subscription, by legislative appropriation, and by grants from various agencies, both public and private. The excavation was begun in 1950 and, after some revision of plans necessitated by the rise in building costs incident to the outbreak of the Korean war, actual construction was started in 1951.

Physically, the Mayo Memorial comprises a 14-story tower section, three wings connecting the tower with older hospital units, and a semi-separate unit which houses the Mayo Memorial Auditorium and two classrooms. The Memorial provides space for the offices and laboratories of the Departments of Medicine, Surgery, Pediatrics, Psychiatry, Physical Medicine and Rehabilitation, Bacteriology and Immunology, Radiology, Continuation Medical Education, and the School of Public Health. It also contains a large suite of operating rooms and numerous conferences rooms, and it will, after completion of remodeling of older Medical Center units, make available an additional 150 patient beds.

But in the words of Edward J. Thye, Governor of Minnesota, 1943-1947, "A memorial to these great sons of Minnesota will be more than stone or steel or bronze. It will be a vital, living force for human welfare." The true Mayo Memorial is not merely the structure we are now dedicating. The Memorial includes also in a very real sense the many dedicated men and women who will work and study and experiment and teach within its walls. Their continuing contributions to the body of scientific knowledge will make it indeed a living memorial to two great humanitarians.

IV.

UNIVERSITY OF MINNESOTA MEDICAL SCHOOL
WEEKLY CALENDAR OF EVENTS

Physicians Welcome

October 25 - 30, 1954

Monday, October 25

Medical School and University Hospitals

- 9:00 - 9:50 Roentgenology-Medicine Conference; L. G. Rigler, C. J. Watson and Staff; Todd Amphitheater, U. H.
- 9:00 - 10:50 Obstetrics and Gynecology Conference; J. L. McKelvey and Staff; W-612, U. H.
- 10:00 - 12:00 Neurology Rounds; A. B. Baker and Staff; Station 50, U. H.
- 11:30 - Tumor Conference; Doctors Hitchcock, Zimmermann, and Stenstrom; Todd Amphitheater, U. H.
- 12:15 - Obstetrics and Gynecology Journal Club; Staff Dining Room, U. H.
- 12:30 - 1:30 Physiology Seminar; Metabolism of Carboxyl-labeled Short Chain Fatty Acids to Carbon Dioxide and Glycogen by the Isolated Heart; Mead Cavert; 214 Millard Hall.
- 1:30 - 2:30 Pediatric-Neurological Rounds; R. Jensen, A. B. Baker and Staff; U. H.
- 1:30 - 3:30 Dermatology Hospital Rounds; H. E. Michelson and Staff; Dermatology-Histopathology Room, M-434, U. H.
- 4:00 - 6:00 Anesthesiology Conference; F. H. Van Bergen and Staff; Room 100, Mayo Memorial.
- 4:30 - Public Health Seminar; Reports of the APHA Conference, Buffalo, New York; Staff members; 15 Owre Hall.
- 4:30 - Pediatric-Medicine Infectious Disease Rounds; Station 33, U. H.
- 5:00 - 6:00 Physiology-Surgery Conference; Todd Amphitheater, U. H.
- 5:00 - 6:00 Urology-Roentgenology Conference; C. D. Creevy, O. J. Baggenstoss and Staff; Eustis Amphitheater.

Ancker Hospital

- 8:30 - 10:30 Medical and Surgical Chest Conference; Dr. Gehlen and Staff; Auditorium.
- 10:00 - 12:00 Surgery Grand Ward Rounds; Begin Floor E4.
- 11:00 - 12:00 Medicine Resident Rounds.
- 12:30 - 2:30 Surgery Out-Patient Clinic; Room 8.
- 2:00 - 3:00 Routine EKG Interpretation; Dr. Sommers and House Staff; Medical Record Library.
- 2:30 - 3:00 Discussion of Problem Case; Auditorium.
- 3:00 - 4:00 Surgery Journal Club; Classroom.
- 3:00 - 4:00 Lectures on Electrocardiography; Ben Sommers; Auditorium.

Monday, October 25 (Cont.)

Minneapolis General Hospital

- 9:30 - Pediatric Rounds; Richard Raile; Station K.
10:30 - 12:00 Medicine Rounds; Thomas Lowry; Station F.
11:00 - Orthopedic and Fracture Rounds; Drs. John Moe and Arthur Zierold; Station B.
11:00 - Pediatric Seminar; Erling Platou; Classroom, Station M.
12:30 - Surgery Grand Rounds; Dr. Zierold; Station E.
1:30 - 2:30 Tuberculosis Conference; J. A. Myers; Station M.
2:00 - Pediatric Rounds; Stations I and J.

Veterans Administration Hospital

- 9:30 - Infectious Disease Rounds; Drs. Hall, Zinnemann, and Middlebrook.
1:30 - Cardiac Conference; Drs. Smith, Berman, Hoseth, Simonson, Swerdlow, Shapiro, and J. Brown; Conference Room, Bldg. I.; Rounds immediately following conference.

Tuesday, October 26

Medical School and University Hospitals

- 9:00 - 9:50 Roentgenology-Pediatric Conference; L. G. Rigler, Irvine McQuarrie and Staffs; Eustis Amphitheater, U. H.
12:30 - 1:20 Pathology Conference; Autopsies; J. R. Dawson and Staff; 104 Jackson Hall.
12:30 - Anatomy Seminar; Development of the Bronchopulmonary Segments in Human Embryos; L. J. Wells; 226 Jackson Hall.
4:00 - 5:00 Pediatric Rounds on Wards; Irvine McQuarrie and Staff; U. H.
4:30 - 5:30 Clinical-Medical Pathological Conference; Todd Amphitheater, U. H.
5:00 - 6:00 X-ray Conference; Presentation of Cases from Ancker Hospital; Drs. Aurelius and Engels; Eustis Amphitheater, U. H.
*4:00 - Special Lecture; "The Metabolic Significance of Cytochondria in Muscle Activity"; John W. Harman, Associate Professor of Pathology, University of Wisconsin Medical School; Owre Amphitheater.

Ancker Hospital

- 8:00 - 10:00 Visiting Staff Rounds.
11:00 - 12:00 Medical X-ray Conference; Auditorium.
4:00 - 5:00 Medical-Pathological Conference; W. F. Mazzitello; Auditorium.

Minneapolis General Hospital

- 9:30 - Pediatric Rounds; Elizabeth Lowry; Station J.
9:30 - 10:30 Obstetrics and Gynecology Staff Rounds; William P. Sadler and Staff; 301 Harrington Hall.

Tuesday, October 26 (Cont.)

Minneapolis General Hospital (Cont.)

- 10:00 - Psychiatry Grand Rounds; R. W. Anderson, Station H.
- 10:00 - Cardiac Rounds; Paul F. Dwan; Classroom, Station I.
- 11:30 - 12:30 Neurology-Neurosurgery Conference; Classroom, Station M.
- 12:30 - 2:30 Dermatology Rounds on Clinic; Carl W. Laymon and Staff.
- 12:30 - ECG Conference; Boyd Thomes and Staff; 302 Harrington Hall.
- 1:00 - Tumor Clinic; Drs. Eder, Coe, and Lipschultz; Classroom.
- 3:30 - Pediatric-Psychiatry Rounds; Jack Wallinga; Station I.

Veterans Administration Hospital

- 7:30 - Anesthesiology Conference; Surgical Conference Room, Bldg. 43.
- 8:30 - Hematology Rounds; Drs. Hagen and Wexler.
- 8:30 - Surgery Journal Club; Conference Room, Bldg. I.
- 9:30 - Surgery-Pathology Conference; Conference Room, Bldg. I.
- 10:30 - Surgery-Tumor Conference; D. Ferguson and J. Jorgens.
- 1:00 - Review of Non-TBC Chest Pathology Conference; E. T. Bell; Conference Room, Bldg. I.
- 2:00 - Combined Medical-Surgical Chest Conference; Conference Room, Bldg. I.
- 2:00 - 2:50 Dermatology and Syphilology Conference; H. E. Michelson and Staff; Bldg. III.
- 4:00 - Thoracic Surgery Problems; Conference Room, Bldg. I.

Wednesday, October 27

Medical School and University Hospitals

- 8:00 - 9:00 Roentgenology-Surgical-Pathological Conference; Paul Lober and L. G. Rigler; Todd Amphitheater, U. H.
- 11:00 - 12:00 Pathology-Medicine-Surgery-Pediatrics Conference; Todd Amphitheater, U. H.
- 12:30 - 1:20 Radio-Isotope Seminar; Sol Sandhaus; Betatron Room in Cobalt Underground Section, U. H.
- 1:00 - 2:00 Dermatology Clinical Seminar; F. W. Lynch; 300 North Clinic.
- 1:30 - 3:00 Pediatric Allergy Clinic; Albert V. Stoesser and Lloyd Nelson; W-211, U. H.
- 3:30 - 4:30 Dermatology-Pharmacology Seminar; 3rd Floor Conference Room, Heart Hospital.
- 4:30 - 5:50 Dermatology-Infectious Disease Seminar; 3rd Floor, Conference Room, Heart Hospital.
- 5:00 - 5:50 Urology-Pathological Conference; C. D. Creevy and Staff; Eustis Amphitheater, U. H.

Wednesday, October 27 (Cont.)

Medical School and University Hospitals (Cont.)

- 5:00 - 6:00 Residents' Lecture; X-ray Circuits; John C. Watson; Conference Room, X-ray Department, U. H.
- 5:30 - 7:30 Dermatology Journal Club and Discussion Group; Hospital Dining Room.
- 7:30 - 9:30 Dermatology Seminar; Review of Interesting Slides of the Week; Robert W. Goltz; Todd Amphitheater, U. H.

Ancker Hospital

- 8:30 - 9:30 Clinico-Pathological Conference; J. Noble; Auditorium.
- 11:00 - 12:00 Medicine Resident Rounds.

Minneapolis General Hospital

- 8:30 - 9:30 Obstetrical and Gynecological Grand Rounds; William P. Sadler and Staff; Station C.
- 9:30 - Pediatric Rounds; Henry Staub; Station I.
- 10:30 - 12:00 Medicine Rounds; Thomas Lowry and Staff; Station D.
- 1:30 - Pediatric House Staff Seminar; Erling Platou; Station I.
- 1:30 - Pediatric Rounds; Erling Platou; Classroom, Station I.

Veterans Administration Hospital

- 8:30 - 10:00 Orthopedic X-ray Conference; E. T. Evans and Staff; Surgical Conference Room, Bldg. 43.
- 8:30 - 12:00 Neurology Rehabilitation and Case Conference; A. B. Baker.
- 9:00 - Gastro-Intestinal Rounds; Drs. Wilson, Zieve, Ferguson, Brakel, O'Leary, Konig, and Swenson.
- 12:30 - Medical Journal Club; Doctors' Dining Room.
- 12:30 - X-ray Conference; J. Jorgens; Conference Room, Bldg. I.
- 1:30 - 3:00 Metabolic Disease Conference; Drs. Flink and Latts.
- 3:30 - Urology Pathology Slide Conference; Dr. Gleason; Conference Room, Bldg. I.
- 7:00 - Lectures in Basic Science of Orthopedics; Conference Room, Bldg. I.

Thursday, October 28

Medical School and University Hospitals

- 9:00 - 11:50 Medicine Ward Rounds; C. J. Watson and Staff; Room 3.148; Mayo Memorial.
- 11:00 - 12:00 Cancer Clinic; K. Stenstrom, A. Kremen, and B. Zimmermann; Todd Amphitheater, U. H.
- 12:30 - Physiological Chemistry Seminar; Phosphorus Metabolism in Nervous Tissue; Walter Nelson; 214 Millard Hall.

Thursday, October 28 (Cont.)

Medical School and University Hospitals (Cont.)

- 1:30 - 4:00 Cardiology X-ray Conference; Heart Hospital Theatre.
- 4:00 - 5:00 Anesthesiology Seminar; F. H. Van Bergen and Staff; Room 100, Mayo Memorial.
- 5:00 - 6:00 Radiology Seminar; Absorbable Bronchographic Contrast Media; Drs. Nice, Azad, and Niknejad; Eustis Amphitheater, U. H.
- 7:30 - 9:30 Physiology 114A Seminar; Hemodynamic Problems; M. B. Visscher and Robert Evans; 271 Lyon Laboratories.

Ancker Hospital

- 8:30 - 9:30 Medical Grand Rounds; Auditorium; Visiting Staff Rounds immediately following Grand Rounds.
- 11:00 - 12:00 Medicine Resident Rounds.
- 2:00 - 3:00 Routine ECG Interpretation; Ben Sommers; Medical Record Library.

Minneapolis General Hospital

- 9:30 - Neurology Rounds; Heinz Bruhl; Station I.
- 9:30 - Pediatric Contagion Rounds; R. B. Raile; Station K.
- 10:00 - Psychiatry Grand Rounds; R. W. Anderson and Staff; Station H.
- 11:30 - 12:30 Clinical Pathological Conference; John I. Coe; Classroom.
- 12:30 - 2:30 Dermatology Rounds and Clinic; Carl W. Laymon and Staff.
- 1:00 - Fracture X-ray Conference; Drs. Zierold and Moe; Classroom.
- 1:00 - House Staff Conference; Station I.

Veterans Administration Hospital

- 8:30 - Hematology Rounds; Drs. Hagen and Williams.
- 8:30 - Experimental Surgery Laboratory Meeting; Conference Room, Bldg. I.
- 9:00 - Surgery Grand Rounds; Conference Room, Bldg. I.
- 9:00 - Surgery Ward Rounds; D. Ferguson and Staff; Ward 11.
- 11:00 - Surgery-Roentgen Conference; J. Jorgens; Conference Room; Bldg. I.
- 1:00 - Infectious Disease Conference; Conference Room, Bldg. I. (Rounds immediately following conference.)

Friday, October 29

Medical School and University Hospitals

- 8:00 - 10:00 Neurology Grand Rounds; A. B. Baker and Staff; Station 50, U. H.
- 9:00 - 9:50 Medicine Grand Rounds; C. J. Watson and Staff; Todd Amphitheater, U.H.
- 10:30 - 11:50 Medicine Rounds; C. J. Watson and Staff; Todd Amphitheater, U. H.

Friday, October 29 (Cont.)

Medical School and University Hospitals (Cont.)

- 10:30 - 1:50 Otolaryngology Case Studies; L. R. Boies and Staff; Out-Patient Department, U. H.
- 11:00 - 12:00 Vascular Rounds; Davitt Felder and Staff Members from the Departments of Medicine, Surgery, Physical Medicine, and Dermatology; Eustis Amphitheater, U. H.
- 11:45 - 12:50 University of Minnesota Hospitals Medical Staff Meeting; Cardiac Output During Occupational Therapy Activities; Arthur B. Quiggle; Powell Hall Amphitheater.
- 1:00 - 2:50 Neurosurgery-Roentgenology Conference; W. T. Peyton, Harold O. Peterson and Staff; Todd Amphitheater, U. H.
- 1:30 - 2:30 Dermatology Grand Rounds; Presentation of Cases from Grouped Hospitals (University, Ancker, General and Veterans) and Private Offices; H. E. Michelson and Staff; Eustis Amphitheater, U. H.
- 2:30 - 4:00 Dermatology Hospital Rounds; H. E. Michelson and Staff; Begin at Dermatological Histopathology Room, M-434, U. H.
- 3:00 - 4:00 Neuropathological Conference; F. Tichy; Todd Amphitheater, U. H.
- 3:30 - 4:30 Dermatology-Physiology Seminar; 3rd Floor Conference Room, Heart Hospital.
- 4:30 - 5:20 Ophthalmology Ward Rounds; Erling W. Hanson and Staff; E-534, U. H.
- 5:00 - Urology Seminar and X-ray Conference; Eustis Amphitheater, U. H.

Ancker Hospital

- 3:00 - 4:00 Medical-Surgical-Pathological Conference; Auditorium.
- 4:00 - 5:00 Medical Journal Club; Conference Room, E5.
- 4:00 - 5:00 X-ray Surgery Conference; Auditorium.

Minneapolis General Hospital

- 9:30 - Pediatric Rounds; Elizabeth Lowry; Station J.
- 10:30 - Pediatric Surgical Conference; Tague Chisholm and B. Spencer; Classroom, Station I.
- 12:00 - Surgery-Pathology Conference; Drs. Zierold and Coe; Classroom.
- 1:00 - 3:00 Clinical-Medical Conference; Thomas Lowry; Classroom, Station M.
- 1:30 - Pediatric Contagion Rounds; L. Wannamaker; Station K.

Veterans Administration Hospital

- 10:30 - 11:20 Medicine Grand Rounds; Conference Room, Bldg. I.
- 12:30 - Urology X-ray Conference; X-ray Department.
- 1:00 - CPC Conference; Conference Room, Bldg. I.
- 2:00 - Chest Pathology Follow-Up Conference; E. T. Bell; Conference Room, Bldg. I.

Saturday, October 30

Medical School and University Hospitals

- 7:45 - 8:50 Orthopedic X-ray Conference; W. H. Cole and Staff; M-109, U. H.
9:00 - 10:30 Pediatric Grand Rounds; Eustis Amphitheater, U. H.
9:00 - 11:50 Medicine Ward Rounds; C. J. Watson and Staff; Heart Hospital Amphitheater.
9:15 - 10:00 Surgery-Roentgenology Conference; L. G. Rigler, J. Friedman, Owen H. Wangenstein and Staff; Todd Amphitheater, U. H.
10:00 - 11:30 Surgery Conference; Todd Amphitheater, U. H.
10:00 - 12:50 Obstetrics and Gynecology Grand Rounds; J. L. McKelvey and Staff; Station 44, U. H.

Ancker Hospital

- 8:30 - 9:30 Surgery Conference; Auditorium.
9:30 - 11:00 Medicine Grand Ward Rounds.

Minneapolis General Hospital

- 8:00 - Urology Staff Conference; T. H. Sweetser; Main Classroom.
9:00 - Psychiatry Grand Rounds; R. W. Anderson; Station H.
9:30 - Pediatric Rounds on all Stations; R. B. Raile.
11:00 - 12:00 Medical X-ray Conference; O. Lipschultz, Thomas Lowry and Staff; Main Classroom.

Veterans Administration Hospital

- 8:00 - Proctology Rounds; W. C. Bernstein and Staff; Bldg. III.
8:30 - Medical X-ray Conference; Conference Room, Bldg. I.

* Indicates special meeting. All other meetings occur regularly each week at the same time on the same day. Meeting place may vary from week to week for some conferences.

V. STAFF LIST -- 1954-55

ADMINISTRATION

College of Medical Sciences

Harold S. Diehl
Dean

William F. Maloney
Acting Assistant Dean

Hospitals

Ray M. Amberg
Director

Gertrude M. Gilman
Assistant Director

Charles Skinner
Assistant to the Director
Manager of the Variety Club
Heart Hospital
In charge of Service and Supplies

Eugene Staples
Assistant to the Director
Manager of the Out-Patient Department
Fiscal Officer

Tomic Romson
Assistant to the Director
General Services and liaison between Medical School and Hospital Operations

Theodore Besser
Hospital Fiscal Supervisor
Business Manager of Rehabilitation Center

Florence Julian
Director of Nursing Services

Gertrude I. Thomas
Director of Nutrition

Hallie Bruce
Chief Pharmacist

Irene Foster
Director of Volunteer Services

Ethel Harrington
Personnel Officer

ANATOMY

Arnold Lazarow, Professor and Head

Edward A. Boyden, Professor Emeritus

Professor
Lemen J. Wells

Associate Professors
Berry Campbell
J. Francis Hartmann
R. Dorothy Sundberg
W. Lane Williams

Instructors
Anna-Mary Carpenter
Richard A. Condie
Joseph Davidson
Marthella Franz
Richard Hibbs
Dennis Kane
Ronald Meader
Richard A. Pettee

Teaching Assistants
Mona Luyten Coetzee
Carl T. Friz
Sayed K. Hamed
Genell Knatterud
Sidney H. Robinow
Albina Yakaitis

BACTERIOLOGY AND IMMUNOLOGY

Jerome T. Syverton, Professor and Head

Professors
Harold Macy
Dennis W. Watson

Associate Professors
Herman C. Lichstein
Joseph C. Olson
Edwin L. Schmidt
Newell R. Ziegler

Assistant Professors
Wendell H. Hall
James J. Jezeski
Karl R. Johansson
Arnold J. Lund
G. Albin Matson
Hugh E. Robertson
W. F. Scherer
J. O'H. Tobin
Robert Wise

BACTERIOLOGY AND IMMUNOLOGY (Cont'd)

Instructors

K. T. Brunner
W. H. Murphy
Frank J. Roth

Teaching Assistants

Richard Berk
Shao Chou
Richard Crowell
James Crawford
Natalie Cremer
Samuel Deal
Elliot Dick
Hanna Doany
Del R. Dubbs
Armond Eiring
Ollie R. Eylar
Robert Ferguson
Marvin Field
George Gifford
Yael Ginzburg
Lawrence Jayko
Sheldon Kayute
Bernard Mieszkuc
Jurij Melnykowycz
Ovidio Mira
William Murphy
Hugh Putnam
John Ross
Orlando Ruschmeyer
Robert Skarnes
Judith Tennant

CONTINUATION MEDICAL EDUCATION

Robert B. Howard, Director

HOSPITAL LABORATORIES

Gerald T. Evans, Director

Ellis S. Benson, Assistant Director

Newell R. Ziegler, Director of
Blood Bank

Robert Wise, Hospital Bacteriologist

R. Dorothy Sundberg, Hospital
Hematologist

Franklin Wallace,
Associate Professor of Zoology,
Consultant in Parasitology

Ruth Hovde, Assistant Professor in
Medical Technology

Verna Rausch, Assistant Professor
in Medical Technology

Grace Mary Ederer, Administrative
Laboratory Technologist

Lorraine Gonyea, Instructor in Medical
Technology, Clerks Laboratory

Instructor and Student Technologist
Supervisors

Harriette Broman
Elaine C. Duerr
Esther F. Freier
Doris M. Hansen
Dorothy Ness

Medical Fellows

Aina Galejs
Michael J. Lyons
Sanford A. Mullen

MEDICINE

Cecil J. Watson, Professor and Head

Professors

Ivan D. Frantz
J. Arthur Myers
Wesley W. Spink
Lewis Thomas

Professors Emeriti

Moses Barron
Carl B. Drake
George E. Fahr
Henry L. Ulrich
S. Marx White

Clinical Professors

Reuben A. Johnson
Thomas Lowry

Associate Professors

C. Knight Aldrich
Edmund B. Flink
Paul S. Hagen
Wendell H. Hall
Frederick W. Hoffbauer
Howard L. Horns
Robert B. Howard
Samuel Nesbitt
Samuel Schwartz
William Stead

MEDICINE (Cont'd)

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Leslie Zieve

Clinical Associate Professors

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Jacob Blumenthal
Reuben Berman
John J. Boehrer
John Briggs
James B. Carey
E. P. K. Fengler
Arthur C. Kerkhof
Donald McCarthy
Chauncey A. McKinlay
Thomas A. Peppard
Frederick H. K. Schaaf
Horatio B. Sweetser, Jr.
Macnider Wetherby
Herman J. Wolff
Ragnvald S. Ylvisaker

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Edmund P. Eichhorn
Abraham Falk
Byrl J. Kennedy
Richard Magraw
Frank Martin
Alvin Schultz
Ralph E. Smith
Robert Wise

Clinical Assistant Professors

Joseph F. Borg
Jay C. Davis
Benjamin Fuller
Robert A. Green
Albert J. Greenberg
Douglas P. Head
Edgar T. Hermann
Wyman Jacobson
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Johannes K. Moen
James G. Myhre
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George G. Roth
L. Raymond Scherer
Andrew Shea
Adam Smith
A. Boyd Thomes

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J. Allen Wilson

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Paul Frick
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William Goodnow
George B. Gordon
Mark Hanson
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Frank MacDonald
William F. Maloney
William F. Mazzitello
Jack Tullius Murphy
Murray John Murray
C. Paul Winchell

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Paul J. Bilka
Ephraim Cohen
David N. Craig
Frederick Englund
David L. Fingerman
Richard Frey
Earl Hill
John E. Holt
Wayne Hoseth
Milton M. Hurwitz
Herbert W. Johnson
Norman P. Johnson
Russell C. Lindgren
David Jones
Walter F. Larrabee
Robert Erwin Lindell
Paul T. Lowry
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John R. Meade
Burton Mears
O. L. Norman Nelson
William E. Petersen
Fred A. Rice
Dean K. Rizer
Alan P. Rusterholz
Rudi Schmid
William M. Schulze
Marguerite Schwyzer
Philip H. Soucheray
Paul Webber
Russell M. Wilder, Jr.
A. Cabot Wohlrabe
Horace H. Zinneman

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Page Edmondson
George Price
Violet E. Swenson

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Carl Alexander
Fouad Bashour
Margret Berendes
Heinz-Dietrich Bick
Malcolm K. Campbell
Alfred Doscherholmen
Ada Sigrid Gilbertsen
Clinton Hatfield
Kojun Ikeda
Kenneth Kahn
Charles Metzler
Ananda Prasad
James Redington
Ernest Reiner
Francois Roux
Naip Tuna

DIVISION OF DERMATOLOGY

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Director

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Francis W. Lynch

Clinical Associate Professors

Stephan Epstein
John F. Madden

Clinical Assistant Professor

Elmer M. Rusten

Clinical Instructors

Elmer T. Ceder
Isadore Fisher
Robert W. Goltz
Elmer M. Hill
Orville E. Ockuly
Charles Balogh
Sheldon Mandel
Irvine Karon
Harold G. Ravits

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William Kushniruk
Charles G. Vaughn

OBSTETRICS AND GYNECOLOGY

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Assistant Professor

Irwin H. Kaiser

Clinical Assistant Professors

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Everett C. Hartley
George E. Hudson
Leonard A. Lang
Mancel T. Mitchell
Samuel Solhaug
Roy E. Swanson
Herbert M. Wynne
William P. Sadler
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Charles N. McKenzie

Instructors

George W. Janda
David I. Seibel

Clinical Instructors

Milton Abramson
Joseph F. Bicek
Ray F. Cochrane
Louis L. Freidman
Joseph Goldsmith
John A. Haugen
Albert F. Hayes
Eugene M. Kasper
Harold R. Leland
Edward C. Maeder
Charles E. Proshek
Owen F. Robbins
Melvin B. Sinykin
Rodney F. Sturley
James J. Swendson
Titus P. Bellville
Konald A. Prem

Medical Fellows

Hershel B. Cope
James M. Fite

OBSTETRICS AND GYNECOLOGY (Cont'd)

Medical Fellows (Cont'd)

Quincy E. Fortier
Robert C. Goodlin
Richard H. Leigh
Ernest W. Lowe
Joseph E. Marvin
Robert K. Nolan
Jay R. Olsen
Phyllis E. Rosander

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