TRANSCRIPT OF PROCEEDINGS

NATIONAL INSTITUTE OF HEALTH

25th ANNIVERSARY OF THE CLINICAL CENTER

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DR. LIPSETT: I am Dr. Lipsett, Director of the Clinical Center and this is a great day to have you all here. Would you please rise now for presentation of the colors by the joint armed forces color guard and the playing of the National Anthem by the Air Force Band.

This impressive group of people that you see on the stage behind me represents some 20 departments at the Clinical Center. I wish this were 25 years ago because we would only have had 10 people at that time and it would have been a lot easier to introduce them to you. I know you would like to applaud each and every one of them, but I would implore you to please hold your applause until I finish the introductions.

To my immediate right, Mr. Lanny Newman, Chief of our Office of Clinical Reports and Inquiries. Ms. Andrea Myer who is representing Ms. Burch from the Record Department, Mr. Steve Groban who is chief of our Outpatient Department. Jim Alexander who is our EEO coordinator. Mr. Keith Collett, Personnel Officer. Mr. Gordon Gamble, Chief of the Environmental Sanitation Control Department. Dr. Lynn Gerber, Chief of our Rehabilitation Department. Mr. Alex Davis, Manager of the Fabric Care Department and Dr. Paul Holland, Chief of the Blood Bank.

Dr. Ron Elin, Chief of Clinical Pathology, Dr. John Doppman, Chief of Diagnostic Radiology. Mr. Howard Kettl who runs the hospital, our chief executive officer. Dr. Jay Shapiro, Associate Director of the Clinical Center. I will introduce our guest of honor to you shortly, Ms. Edith Jones who, as you know, runs our Nutrition Department. Dr. Griff Ross, Deputy Director of the Clinical Center. Dr. Phillipe Cardon, Associate Director of the Clinical Center and Dr. John Lynch, Chief of Occupational Medicine and Dr. Lou Thomas, Chief of Pathological Anatomy. Dr. Thomas Macnamara who is Chief of Anesthesiology and Dr. Gerald Johnston, Chief of Nuclear Medicine. Vernice Ferguson, Chief of Nursing and Dr. Joe Gallelli, Chief of the Pharmacy and Dr. Tom Lewis, Tom, I can never remember the title of your Department, but it is Clinical Management Systems, Ms. Barbara Murphy who is Chief of Social Service Department and Chaplain Leroy Kerney who is head of our Spiritual Ministry Department and Ms. Mary Ruth Calley who is responsible for putting on all of the performances, dates, get togethers, revivals and so on at the Clinical Center and the NIH have had for all these many years.

(Applause)

What we are celebrating today is not just that this building has been standing for 25 years, celebrating the fact that there are so many people here who have worked for 25 years or some portion of that 25 years to make the Clinical Center known throughout the world both for its healing and for science.

Today's ceremony is also special because we have a group if workers who have had 25 years of continuous service the Clinical Center, and thus have participated more than most of us in this really great enterprise.

Now, it is with considerable pleasure that I welcome Dr. Henry Sebrell back to the National Institutes of Health on the 25th anniversary. In 1953, Dr. Sebrell was the Director of the

National Institutes of Health and had the overall responsibility for the initiation of patient care in this hospital.

Dr. Sebrell is a physician, a scientist, a nutritionist, an administrator. He was in the Public Health Service for 30 years. He served as director of the old Institute of Experimental Biology and Medicine which is now the National Institute of Arthritis, Metabolic and Digestive Diseases. He was director of the NEH from 1951 to 1955, he was then Director of the Institute of Human Nutrition at Columbia and right now he is the Medical Director of Weight Watchers International. As he mentioned to me, he had to retire from Columbia, but he did not have to retire from working, so he promptly went out and found himself another job.

I have spoken to several people who were here when Dr. Sebrell was Director and they have told me that one of his particular interests was this building and what was going to happen to it, what sorts of people were going to go into it and the sorts of research that were going to take place in this building. So, it is with great pleasure that I introduce Dr. Sebrell and welcome him back to the Clinical Center. Dr. Sebrell?

(Applause.)

DR. SEBRELL: As I was sitting here, I was thinking that it must have been about 20 years, or maybe a little more, since I have had an opportunity to appear on this platform and talk to the employees, friends and colleagues of the NIH. I really appreciate this opportunity to, you might say, come home again. I doubt if many of you sitting here can visualize what the NIH was like before we had a clinical center.

Imagine this place with the Clinical Center removed. Before we had the Clinical Center, the NIH had no clinical research facilities of its own anywhere. The people who wanted to do clinical research at the NIH, and there were many opportunities had to rely on their colleagues and medical schools and other hospitals to get the necessary clinical facilities to carry their laboratory work into the clinic.

This was very unsatisfactory from many points of so it was decided that we would go into clinical research. It was one of the major decisions ever made, and I think the most important decision ever made in affecting the National Institutes of Health.

Of course, the planning and construction of the Clinical Center took quite a long time and as I read about the problems you are having today, they don't seem very different from the problems we had in those days. The first problem was money. We never had enough money. The next problem was space. Nobody ever had all the space they wanted. So, when we were planning the Clinical Center, the first problem was how did we divide the space among the various institutes.

At that time there wasn't any Institute of Arthritis and Metabolic Diseases. There was only a group of laboratories. But we had to plan for that institute and that institute was created almost about the time that the Clinical Center was opened. So the planning and the development of the Clinical Center took place under the Truman Administration and there is a picture out there in the lobby of President Truman laying the corner stone for the Clinical Center.

The Center didn't actually open and take its first patient until July 1953. The problems inherent in opening the Clinical Center were very great indeed. The administration had changed. Eisenhower was now President and up to that time there wasn't even a Department of Health, Education and Welfare. This was created almost at the same time and the first Secretary of HEW, some of you may not remember, was a woman; A Mrs. Oveta Culp Hobby. She was a woman of tremendous administrative ability. She had organized the Women's Army Corps during the war and had been the leader of it and she became the first Secretary of HEW.

It was under her administration that we opened the Clinical Center and I never will forget, one of the first questions she posed to me before we opened the clinical center concerned money. The new administration, of course, wanted to save money and she asked me, in effect, what would it amount to if we did not open the Clinical Center. The building was just about completed, we were almost ready to open, and now she wanted an estimate from me as to what the damage would be if we did not open the Clinical Center.

Well, I can tell you, the damage was shown to be terrific. So, it was decided that we would open the Clinical Center. The first patient was admitted on July 6, 1953 and appropriately enough, he was a cancer patient admitted by Dr. Roy Hertz, for studies on hormone treatments of cancer of the prostate.

He remained under Dr. Hertz's therapy for a year and a half on this continuous study protocol. He wasn't the only patient admitted. There were five more patients admitted that first day and all the institutes at that time shared the first ward that was opened.

We must have been doing something right because by the end of 1954, 1,542 patients had been admitted. Now, the problems were, I think I have said, very similar to those we have today. This was carrying the Federal government for the first time into clinical research. We were opening a hospital, not to treat patients, but to find out things about disease and this posed a whole new series of ethical moral problems that were the same problems that you see being so widely discussed publicly today.

Our first concern was that we were never going to do anything that would knowingly hurt a patient. In order to do good research, we figured we would have to give the best possible medical care and that was the prime consideration of the Clinical Center was that the care of the patient we would get here would be the best he could get anywhere in the world. At the same time, he would be contributing to our knowledge of medicine.

These ethical problems were settled. The Clinical Center has gone on as I am very happy to see and the importance of it, I think, is emphasized by an article I just read in the June issue of Federation Proceedings which is analyzing the research production of the NIH. Between 1973 and 1975, the NIH produced more medical research paper per year than any other group in the United States. The NIH research production accounted for almost four percent of all the papers published from the United States.

There were 4,885 scientific papers published from this institute between 1973 and 1975, but the point I want to make here is that only 40 percent of these were basic research. 60 percent of them were clinical studies and that, I think, illustrates better than anything I can say the

importance of the Clinical Center, not only to the NIH, but to medical research throughout the world.

Now, this building of the addition gives me great satisfaction to come here and see that the Clinical Center is still going ahead and is going to do more and better in the future.

I think it was Lord Byron who said that the best prophet of the future is the past. I think on the basis of the past of the Clinical Center, we can look forward to a very great future indeed. The facilities are only incidental to the people. The people are the ones who really make it great. It was Isaac Newton who said that he felt like a great ocean of truth lay undiscovered in front of him. I think as long as the staff of the NIH feels that there is a great ocean of undiscovered truth ahead of us in medicine that the NIH will continue to lead the world in medical research. Thank you, very much.

(Applause.)

DR.LIPSETT: Thank you, Dr. Sebrell. As you can see, a lot of the problems haven't changed. We still worry about space, we still worry about which institutes get how many beds and we still worry about money to support the enterprise. Before I introduce our next speaker, I want to let you know that somebody is here who succeeded Dr. Sebrell and guided the NIH through its many years of growth and development. Dr. James Shannon, would you please rise, sir?

(Applause.)

DR. LIPSETT: Now, one of the people who has been with us since the Clinical Center opened is Ms. Edith Jones. She is Head of our Nutrition Department. She has a long and intimate relationship with physicians and all of the members of the members of the staff, and who remembers this place from a different perspective than many of us. I would like her to tell you a little bit of how it was then. Edith?

(Applause.)

MS. JONES: Thank you, Dr. Lipsett. I am pleased to be able to see Dr. Sebrell here today and also Dr. Shannon, to renew our acquaintance. I am also pleased so see many of my co-workers and our friends and this is a great day to celebrate, I feel. I arrived at NIH in September of 1952. Already on duty was the director of the Clinical Center, Dr. John Trautman, and several of his associates: Dr. James P. Dixson, Dr. Hewitt, Dr. Daniel J. Daley] and the Chief Nurse, Ms. Mildred Struve. In addition to these, Mr. Milton W. Skolaut], the Chief Pharmacist was here, Dr. Fried [David Fried], Chief of Patient Rehabilitation, and Dr. Lloyd who was chief of the Dental Program [Ralph S. Lloyd].

We all shared the one conference room in [Building] One and I might say, it was a bit close quarters. The Clinical Center was in the finishing stages and at that time, we expected to open on April 20, 1953.

On the wall in my office, I have the much prized group picture which includes the Director's staff and the Department heads who were privileged to open the Clinical Center. In addition to those that I have mentioned, I know a number of you will remember these. Mrs. Patricia Boyer who was chief of housekeeping department. Dr. Murray Brown who was

Assistant Director of Education and Training. Mr. Judson Hardy who was chief of information services. Dr. Clarence Hebert who was Chief of Anesthesiology, Mr. Richard Henschel who was Executive Officer, Dr. Ted Hilbish who was Chief of Diagnostic Radiology, Ms. Olive Johnson who was Chief of Medical Records. Ms. Ruth Johnson who was Chief Nurse, Dr. Dan O'Keefe who was Chief of Social Work, Dr. Ralph Lillie who was Chief of Pathology, Mr. Phillip Simon who was Administrative Officer, Dr. Robert Smith who was the Chief Surgeon of the Clinical Center and Dr. George Williams who was Chief of Clinical Pathology.

It really was not until June of 1953 that we got the final signal to open the clinical center, but not without constraints. As Dr. Sebrell has related, we had to open with the staff on duty. There were money problems then, and no further physicians could be authorized until sometime later in the year. That sounds familiar, doesn't it, to all of us here? I found in my files a six page ditto memorandum that included one form and that includes all the procedures that we had to work with when we opened the Clinical Center. Compared to today's operation with the many procedure manuals and other documentation that we had, I would say that we had a very simple life by comparison.

At the beginning, it was the 12th floor that was finished and opened with 26 beds for patients and they were to service three institutes; Cancer, heart and arthritis. To provide food service for the patients and a very limited food service for personnel, we opened the main kitchen on the B-1level and I have always described those days in our department as like operating a battleship with an LST complement.

To open the Clinical Center, the administrative decision was made to bring the entire personnel department of NIH over here to the first floor. This space that they moved into was the space that was originally intended for the chief nurse and the chief dietician and so Ms. Johnson, who is our second chief nurse, and I moved to the first floor in the A wing and then to unoccupied patient areas as they became available. First, we were on the ninth floor, then we moved to the sixth floor, then to the second floor and finally to the first floor. Now, with the ARCF moves these days, I really feel like history is repeating itself. As many of you know, I have now progressed up to the second floor.

(Laughter.)

I was talking with Mrs. Edgar [Emma Lois Edgar] of our staff who was here to open the Clinical Center and she reminded me that in those days we didn't have bus service into NIH and that we took the bus to Navy and walked over. We both concluded that July 6th had to have been a bright sunshiny day or we would have had to have remembered something about the weather.

Several of us vividly remember commuting via street car to the Friendship terminal and then on the rest of the way by bus to work. We spent the summer of 1953 perfecting our procedures and in September, we opened the fourth floor for patients from neurology, microbiology and mental health.

Gradually, over the next four years, we opened the rest of the Clinical Center for patients and as of July 8, 1957, all 500 beds were available for occupancy.

Ms. Benella of our staff and I were reminiscing and she reminded me of our problems in the early days with field mice. History may repeat itself again. They came with our new building and during the first week that we opened the metabolic kitchen unit on the ninth floor, north, we trapped nine in one evening.

The opening of the Clinical Center added a new challenge to many of NIH's general service divisions, and particularly to procurement. On the first day of our operation. Our meat delivery didn't arrive as scheduled and to handle this situation, I took a \$5 bill from my purse and sent our meat cutter down to the Giant in Bethesda to buy ground meat for our luncheon meal. At that time, \$5 was more than adequate to purchase food for those five or six patients, but with today's meat prices, I certainly would hesitate to underwrite such a purchase for the Clinical Center.

When we opened, the Clinical Center was considered the showplace and the most modern hospital in the United States. We were three years in the planning stage by a small cadre headed by Dr. Masur, one of our former Directors, and three years in the building. So, you see, we are really 31 years old today, rather than 25.

Our building and our work have attracted many visitors from far and wide. I can remember the day that Ms.Willy Brandt visited us. She was wearing a lovely sable coat and I kept offering to hold her coat because I felt it was so warm with the television cameras on her. Finally, she whispered to me, I have to keep it on. You see, I photograph better that way.

(Laughter.)

We planned for days for the visit of Mr. and Mrs. Khrushchev only to be disappointed on the day of the visit to learn that they had decided not to keep their planned schedule.

In making plans for this visit, Dr. Masur requested that our department prepare refreshments and to do this we had to mix and make everything under the watchful eyes of both secret services. When the cookies were completed, we had to put them all in the refrigerator under lock and key and the key was turned over to the secret service to hold overnight.

The Empress of Iran first visited us in April of '62 and I was privileged to show her one of our metabolic kitchen units. Dr. Patrick Sullivan, I suppose I should put the J in there to be right, Dr. Patrick J. Sullivan, a physician of our Employee Health Service, accompanied me as interpreter because I didn't want to depend on my college French to be able to talk with the Empress.

We were honored to have President Lyndon Johnson out here on two occasions to visit us. He and Mrs. Johnson made such a hit with my staff that we kept the punch cups they drank out of on display in the main kitchen for several days before we washed them.

(Laughter.)

Some of the old timers will recall the July 1954 visit of Miss Geneviève de Galard, better known as the "Angel of Dien Bien Phu". She was here at the invitation of our Congress in recognition of her courage and conscientiousness of refusing to leave injured troops during the battle of Dien Bien Phu which ended in May of 1954 after a 56 day siege. We have had an

opportunity to initiate many interesting and unusual programs here at the center and one that required many innovations was the mental health program investigating delinquency in adolescent children. To provide for half-way progression into the community, NIH built a small cottage just off of the Old Georgetown Road in the area occupied by Building 35, 36 and 37. The cottage was known at that time as T-4.

It accommodated six boys and a housemother and housefather and nursing, housekeeping and nutrition had full time staff assigned there along with some basic simple services provided for the clinical center. During the two year existence of this program, we had an opportunity to really define our teen care approach.

Some of you will remember that the initial plans called for the nutrition department to also operate the food service for NIH personnel. The special law that permitted this had the condition that we must break even each budget year. With the Bureau of the Budget looking over our shoulder continuously, we opened the service gradually and continued to operate it until 1968.

Initially the space that is presently occupied by R&W was designed and equipped as a soda fountain shop. The first week we attempted to serve the personnel there at noon and the menu, of course, was limited to sandwiches and cold plates and soups and beverages. This resulted in bedlam for people came from all over the Reservation to try out the new service and by the end of the week, we had moved into the cafeteria space with this limited menu and opened at noon only.

For those few people who had to be on duty in patient care after 6:00 p.m., we served a hot meal on the second floor and I believe they paid the high price of \$.50 for a complete meal.

By September, we were able to add some hot items to the noon menu and gradually we were able to open the cafeteria all day and we eventually, some of you will remember, converted the soda fountain shop into a coffee shop which stayed open all night. I won't belabor all the changes we went through in personnel feeding, but there were two years when the nutrition department staff enjoyed real popularity because of our unannounced bonus days.

At the cafeteria line, when we made money, we tried to give it back to the customers. To do this, we would sell broiled lobster tails one day for \$.40 each and another day we carved prime ribs at the counter for \$.45 and even another day we sold all sandwiches for \$.15. This drew such large crowds that it was hard to keep up with the baked products and the salads on the counters during those days.

I can also remember very vividly the great stir we caused in January of 1959 by changing the price of coffee in the cafeteria. This brought forth four paragraphs in Jerry Klutz's(?) column in the Washington Post because we were charging \$.03 for the coffee cream. You see, a cup of coffee at that time was \$.10 and the cream was going to be an additional charge.

We had some recipes that were developed out of necessity, too. Because of two typographical errors in the early days of our operation, we received not 10 boxes of graham crackers, but 10 cases. They were delivered to Building 13 for storage. After three months of operation, we received an inventory handwritten, because this preceded the computer age, and

found this excess and also the same excess in Rice Krispies. So, Ms. Margaret Vance, our dietician in charge of food production at that time, went to work and developed two new recipes to take care of our overstock. Thus, the creation of our graham cracker cake with custard filling and Rice Krispies cookies. Both were popular with our patients and customers and became standards items on our menus.

Now, before I close, I just have to do a bit of bragging. Today there are 19 original staff members of the original Nutrition Department who are being recognized for their contributions. 13 of these 19 actually experienced the opening day. The other six joined us before December of 1953. Two of us are dieticians, two were bake cooks, one a baker, three were food service workers assigned to the main kitchen, one a food service worker assigned to the cafeteria counter, two were [dietetic] assistants and the other eight food service workers assisted in the opening of our first floor kitchen unit.

This could go on forever. I thank you, though, for allowing me this opportunity to relive these 25 years of my life. Working with the Clinical Center staff has been challenging, exciting, and rewarding. There have been many accomplishments that I am proud to have been associated with in some small way. I think the one word, though; that describes our past, our present and our future is change. Thank you.

DR. LIPSETT: Those are words from someone who really knows how this place has operated for 25 years. I thought in a few minutes I would try to tell you some of the important experiences in which you have shared. The NIH, and within the Clinical Center, there has been a series of medical discoveries over the years that have been recognized in many ways.

It has been said that great discoveries have been made by great men who were able to stand on their shoulders of thief predecessors and see further than anyone has seen in the past. That is certainly true. Great discoveries are also made because there is wonderful support. The supporters are the scientists, but the support in a hospital and for discoveries in medicine are made by all of the people in the hospital, so I would like you to see some of the things that have happened here because you were part of them. Could I have the first slide please?

(Slide #1)

I am going to mention our four Nobel Prize Laureates and we all recognize the Nobel Prize, but you should all know that that is only one of the many prizes won by investigators at the Clinical Center and at the NIH. They actually number in the hundreds and it would take me a long afternoon to discuss all of them.

In this first picture, you see the cornerstone laying ceremony and for those of you who are old enough, you will recognize President Harry Truman over to your right and Dr. Sebrell over to your left and next to him is Oscar Ewing who was the head of Social Security Administration and the other gentleman in the picture I don't know. May I have the next slide, please?

(Slide #2)

Now, this is Dr. Marshall Nirenberg, the first member of the NIH to win a Nobel Prize and you may remember that Dr. Nirenberg cracked the genetic code. That sounds great, but what does it mean to us? Well, it is beginning to mean more and more all the time. If you see any of the headlines about DNA recombinant techniques, that is another phrase, none of that would have existed without Dr. Nirenberg.

If you read that pretty soon bacteria will be able to manufacture human insulin for us, that is a direct result and a direct outgrowth of Dr. Nirenberg's work, learning how genes control the synthesis of these important substances such as insulin.

Dr. Nirenberg is still here. He is no longer in this building, but the work that he did was done in the Clinical Center. Next slide please.

(Slide #3)

This is Dr. Chris Anfinsen, our second Nobel Laureate. Chris is still working in this building. What he did was he found out how some very important chemicals in the body are enzymes that constructed, and how the very nature of their structure affected the way they work. This is very interesting from a basic science view point, but it is much more interesting when you begin to put it together with a variety of diseases that are connected with the way enzymes work.

We are now able to modify because of the sorts of contributions that Dr. Anfinsen and his associates made. Many of these people you see around the hospital now and the lovely thing about it is that they are all still continuing their work and continuing to contribute. The next slide, please?

(Slide #4)

This is Dr. Julius Axelrod, NIMH. He is still at the NIMH and he is still doing his work. Dr. Axelrod, for many years, had been studying how the nervous system worked and how the chemical messengers in the nervous system controlled its actions. He was awarded the Nobel Prize with two other investigators studying the nervous system and as a result of his work we are beginning to get a handle on many of the diseases that afflict people, many of the nervous system diseases. We have been able to devise drugs which are able to modify these diseases as a direct outgrowth of the understandings derived by Dr. Axelrod. The next slide?

(Slide #5)

Two years ago, Dr. Daniel Gadjusek from the National Institute of Neurology and Communicable Disease and Stroke won the Nobel Prize. It was very interesting. Dr. Gadjusek, many years ago, was studying a disease called Kuru which exists only in a small group of aboriginal tribesmen in the highlands of New Guinea. I think it is one of the wonderful things about the NIH that he was able to continue doing this work and it didn't really seem as though it was going to be terribly relevant to the health of people around the world or to the health of the American citizen.

In fact, as it turned out, as a direct outgrowth of that work, that he and his collaborators have identified a whole new class of viruses, different from anything that we have known before. More than that, this class of viruses was responsible for some rather bad diseases that people get which affect the central nervous system and the brain and which can cause mental disorder and

death. As a result of the knowledge gained here, I think we can pretty confidently look forward to the possibility of preventing these diseases in the future. It is a very strange virus and only from research that was done without any vision as to where it would lead, have we now come to some very important findings that will affect your health a mine. The next slide, please.

(Slide #6)

I am sure you recognize Dr. Fredrickson [D.S. Frederickson]. Dr. Fredrickson was in the Heart Institute for many years and when you hear about cholesterol and when you hear about the relationship of various states of high cholesterol in the blood and heart disease, you can thank Dr. Frederickson and his collaborators for much of that information.

During the time that he was an active investigator, that spans some 20 years, in fact, he started here in 1953 when the clinical center opened, he made many of the very basic discoveries of first how to measure particular forms of cholesterol in the blood, how to associate it with particular forms of heart disease, and devise some of the dietary and drug treatments for this. The next slide, please.

(Slide #7)

Now also in the Heart Institute is Dr. Glen Morrow [Andrew Glenn Morrow]. He is still here and still operating, as many of you know, and Dr. Morrow is one of the pioneers in heart surgery, one of the pioneers in devising artificial heart valves, and devising new types of surgery for particular heart disease. He still remains one of the outstanding surgeons for a particular type of heart disease. The next slide.

(Slide #8)

Here is Dr. Fred Bartter who is still here and working with us. He is an endocrinologist. I am also an endocrinologist, so maybe I know his work more intimately than most. Fred and his collaborators were able to uncover and describe new forms of high blood pressure, treatable forms of high blood pressure, and, in fact, continued to work with high blood pressure and even now, showing how people with what we call essential high blood pressure, or blood pressure we didn't know the cause for, can be subdivided and treated differently.

He has made a number of other important medical discoveries which have to do with the functioning of the endocrine system. The next slide please.

(Slide #9)

Dr. Sebrell mentioned Dr. Hertz. Dr. Hertz was my first chief when I joined the NIH in 1957. Dr. Hertz, too, was an endocrinologist, but one of the important medical discoveries that was made by Dr. Hertz and his collaborators was the first successful treatment of a cancer that had spread, that had metastasized. This was a cancer that was derived from the placenta in pregnant women mostly. It was called choriocarcinoma, and once it had spread, I don't want to say 100 percent of the women died, but it was very close to that.

As a result of the studies carried out on the 12th floor, now some 90 percent of patients with this disease, in fact, can be cured and the first 12 or 15 patients with this disease that were treated by Methotrexate and subsequently other drugs, were treated here on the 12th floor of the

Clinical Center. These are now methods of treatment that are very widespread. The next slide, please.

(Slide #10)

I think, in fact, this shows Dr. Hertz admitting the first patient to the Clinical Center on July 6, 1953. The next slide please.

(Slide #11)

This is Dr. Tom Frei who was in the National Cancer Institute for many years. He is now at Sidney Farber Hospital in Boston. The next slide.

(Slide #12)

This is his previous co-worker, Dr. Emil Freireich Friereich Emil who is now chief of Chemotherapy at the M.D. Anderson. Drs. Frei and Freireich started working in the National Cancer Institute, if you had a child with acute leukemia, the changes were about nine in ten that the child would die within one year and about 10 out of 10 that the child would be dead within three years. Right now, as a result of their work and of many others, some 50 percent of children with acute leukemia in childhood are probably being cured. The others are in long term remission and this is work that has proceeded, started by them and is now still going on within the National Cancer Institute in 2-East and 2-B. The next slide, please.

(Slide #13)

This is Dr. Seymour Perry. Sy is now working with Dr. Frederickson in Building One. When you pass that unit that says Plasmapheresis, out there, that is a direct outgrowth of Dr. Perry's work. Dr. Perry was working with patients with cancer, leukemia, with other forms of blood disease and he recognized the need for cell separators so that we good get white cells and platelets and the various constituents of the blood out of the blood, return the rest of the blood to the people and then give these constituents to the patients who needed them to support them during times of chemotherapy. With engineers from IBM and some other places, he developed the first cell separators and these have been improved upon, of course, separately and the results of some of this is what you see in the plasmapheresis unit.

(Slide #14)

Here is Dr. Barry Blumberg. He used to be in the Arthritis Institute. He is now in Philadelphia. When he was here he was studying some constituents of the blood and he found protein in the blood that had come from some aborigine in Australia and he called this the Australia antigen, some four years later, in fact, he found that this was a marker for hepatitis and as a direct result of this sort of finding, we now can prevent some 90 percent of those cases of hepatitis that can result from blood transfusion because we can test the blood ahead of time, find out if this antigen is there and if it is there, you don't use the blood.

(Slide #15)

Working with Dr. Blumbergon this new antigen was Dr. Harvey Alter. Harvey is still in the blood bank now and he with people in the blood bank and the infectious disease institute have now shown that the remaining form of hepatitis, which doesn't even have a name yet, but he has shown that there is another transmissible form of hepatitis and they are beginning now to devise ways of protecting that form of hepatitis.

Once that is done, I think that the whole process of blood transfusion will be completely safe with respect to transmitting this virus that causes hepatitis or very severe inflammation of the liver.

(Slide #16)

Here is Dr. Jesse Roth. Jesse has been at the Clinical Center for some 14 years now, I think it is, and is in the Arthritis Institute. He is head of the diabetes branch. He has made two very important medical discoveries. One has to do with a tumor in the pituitary gland in the brain, which secretes a substance called growth hormone and as a result of Jesse's work, we now know how to diagnosis this and how to treat it. Most recently, though, he has been involved with some very basic problems in diabetes: How insulin actually works. He is finding out how it works and as a direct result of that, he has found some new forms of diabetes and, more than that, he has demonstrated very clearly how, when obese people diet, they can bring their diabetes under control. He provided the basic science underpinnings for what we now can recommend for the obese diabetic.

Before I show the last slide, I just want to say that this represents a very personal view of mine of some of the medical discoveries that have had very wide effects. There are others that have probably had just as wide effects that maybe I haven't recognized or neglected, but there are many others that have contributed tremendously to disease discoveries and to discoveries made throughout the country.

(Slide #17)

The final one, you will recognize, is Dr. Griff Ross, my co-worker for many years, and Griff has done many things in this hospital. One of them, he was one of the first to really be able to describe the human menstrual cycle with any precision and to develop the measurement so he could do it. As a direct result of that sort of work, we understand a lot of disorders of the menstrual cycle. We understand a lot of the problems of fertility and sterility in women and how to correct them.

This is a really very brief and quick and sort of dirt overview of some of the, what I think, are terribly important medical discoveries that come out of the Clinical Center of which you should feel a part. You were there, you were part of it, and for that, I thank you.

(Applause.)

We now come to a good part of the program, that is to recognize those of us who have been with us in continuous service in the Clinical Center since it opened and I am going to call on Dr. Griff Ross.

End of Transcript