



The University of Texas M. D. Anderson Cancer Center  
**Making Cancer History® Voices Project**

**Jordan Gutterman, M.D., Oral History Interview**  
March 29, 2006

**Interviewer:** Lesley W. Brunet

**Place:** Dr. Gutterman's Office, Smith Research Building, The University of Texas M.D. Anderson Cancer Center, Houston, Texas

**Chapter 01: Recruitment to MD Anderson**

A: Joining MD Anderson/Coming to Texas

Story Codes:

A: Joining MD Anderson

A: Professional Path

C: Mentoring; D: On Mentoring

A: The Researcher

A: Definitions, Explanations, Translations

***Lesley W. Brunet***

00:11

This is Lesley Williams Brunet about to record an oral history interview with Dr. Jordan Gutterman. The date is March 29th, 2006. This interview is being recorded in Dr. Gutterman's office at the SCR2 in Houston, Texas. This interview is being recorded for the MD Anderson Cancer Center oral history project.

***Lesley W. Brunet***

00:41

Why don't we start by talking about when you arrived at MD Anderson? What year did you move down from NCI?

***Jordan Gutterman, MD***

00:51

No, I never was at NCI.

***Lesley W. Brunet***

00:52

Why did I think you were?

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***Jordan Gutterman, MD***

00:54

Yeah. I trained, I went to medical school at the Medical College of Virginia. And then did my five years of internship residency and fellowship at Duke. And this was during the Vietnam Era, I was in the Berry Plan. And I was lucky enough to spend my two years of military service as head of hematology at the Brooke Army Hospital in San Antonio. That's what got me to Texas.

***Lesley W. Brunet***

01:20

Oh. That's right. That's your Texas connection.

***Jordan Gutterman, MD***

01:22

Yeah. And I was very lucky. This was just fortuitous that they had put in as the oncologist, which was just emerging as a specialty, medical oncology. A doctor, physician from Bogota, from Columbia, Victorio Rodriguez, who had just finished his training here at MD Anderson -- particularly worked with Gerry Bodey on infectious diseases. And he was -- I just arrived at Brooke for two years as an oncologist. I'm not sure oncology was even recognized as a specialty, but that's what he was. He's not trained as a hematologist. But I was in charge of the whole operation, and they had a hematopathologist there. We had an incredible two years. And I was trained as a classic hematologist, and spent time in the laboratory. And I learned a lot of oncology from Victorio, because I didn't -- I had virtually no experience in solid tumors or modern day chemotherapy, particularly acute leukemia. And because of Victorio, he had gotten the MD Anderson, the developmental therapeutics people to act as consult -- to be consultants at Brooke. And periodically they would show up. This is how I met Freireich, and Evan Hersh, and Gerry Bodey, maybe one or two others. And I don't remember if Tom Frei came down, but I remember Freireich, and of course, once you meet Freireich, you don't forget Freireich, and Victorio always had plans to come back to MD Anderson. And over the course of two years of working with him, we became close friends, and it was natural for me to think about this. I thought about going back to Duke, but I came to MD Anderson with him and I was extremely impressed with the medical center and MD Anderson. I think back about those times, which is 35 years ago. This was 1969 to '71, when I was in San Antonio. And I remember driving to Houston thinking what an enormous city, compared to San Antonio. And the medical center, I'd never seen anything like it. And I said, this is the place to be. If I want to do cancer research, which is really what I was committed to. During my hematology, I gravitated to be interested in malignancies and so forth. And so, when I finished my military training in the summer of 1971, July, I came here for about -- from July and October of '71 -- initially, it's what they called -- they don't have the positions anymore -- a "faculty associate." And that was a very junior position. It was like, not a fellow anymore. And then immediately, I start working really hard, and I think they were willing to give me, I think an assistant professorship in October 24th, I think, 1971. So that's when I came here.

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And that's how I got here, through Victorio Rodriguez, who came back at the same time and stayed only about five years, and left, I think he just got fed up with the politics of the place, and went to San Antonio into private practice of oncology, where he still is today.

***Lesley W. Brunet***

04:33

So when you first came, what did they have you do? Or what projects did you work on?

***Jordan Gutterman, MD***

04:40

Yeah. I was assigned to -- initially I wanted to work with Victorio, because we were friends on infectious diseases, and Freireich said no, that's -- you need to work in immunology. And I'm still stuck with that title, people think I'm an immunologist. But we'll come back to that later. But that's OK. So he assigned me to work with Evan Hersh. Evan was head of a section of immunology and immunotherapy, I guess they called it. And so, Evan was very good. He set me up in a laboratory with a research technician, and I started two major projects. One was, in the laboratory, studying the immune response to acute leukemia, which resulted in some really interesting publications in the '72, '73, '74, early '70s. How the body responds to leukemia. We won't go into those results, but they were some really interesting papers. We even had one in Science.

***Lesley W. Brunet***

05:39

Come back to that in maybe another interview.

***Jordan Gutterman, MD***

05:42

And my clinical duties were split between two things. I worked in the outpatient clinics seeing melanoma patients. And started working with immunotherapy. When I was in the Army, in 1969, a paper -- and this is, eventually, what got me to interferons, so it's an important part of the story. In 1969, I read a paper by George Mathe, M-A-T-H-E, who was a former Gottlieb winner, about the use of BCG and the treatment of kids with childhood -- you know, children with ALL. And so, when I came to MD Anderson, Evan asked me what I wanted to work on, and he, too, was interested in this whole thing, but he himself didn't want to really initiate it. So I started a program using BCG immunotherapy. Immediately when I came here, using melanoma, but not acute leukemia as a model initially, and then also we worked in AML, which I'll come back to.

***Lesley W. Brunet***

06:48

For people who don't know what BCG is, can you explain exactly what it is?

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***Jordan Gutterman, MD***

06:53

Yeah. BCG, I think it stands for Bacillus Calmette --C-A-L-M-E-T-T-E -- dash Guérin, G-U-E-R-I-N. Because I'm not in the field for over 30 years, I don't know if it was one man or two men who -- it's a TB vaccine. It's a live TB vaccine. So it's Bacillus Calmette-Guérin. It's an attenuated Mycobacterium, or TB vac that's used to vaccinate against tuberculosis. And I haven't really kept up whether it's in use at all -- it is an approved drug, actually, today, for bladder cancer, actually. But it was kind of the exciting thing. I mean, there was, of course when I came, surgery and radiotherapy, obviously, had been well established, and chemotherapy was now solid rock, you know. In large part because of Frei and Freireich and all that work that came out of the NCI, first in leukemia, then in Hodgkin's which -- and I learned all that stuff when I was in -- particularly when I was in the Army. Although, when I was in Duke in training, we were -- I was aware of Frei and Freireich and leukemia, because we began to use some of the same drugs they were using at the NCI in Hodgkin's disease as well as in myeloma. At Duke. So, I came and set up a BCG program. Initially in malignant melanoma. And shortly thereafter, also in patients with acute myeloid and acute lymphocytic leukemia. That was the major focus. And eventually, as well as in lymphomas. So from 1971 through my own direct participation, '76, '77, I was in charge and collaborated as well with multiple studies at BCG as immunotherapy, which we can come back to. And as well as studying the immune response to acute leukemia. So it was really all immunological. And then because of the melanoma studies of BCG with -- alone in early disease, and with chemotherapy in late disease, I had a pretty heavy, heavy duty clinical load of patients in the outpatient. And in addition, there were only two of us rounding on the acute leukemia service, which could never happen today. You know, it was still busy, but it was Ken McCredie and myself. Rounding, alternating, attending on the acute leukemia service. I was one...

***Lesley W. Brunet***

09:19

And how large was that, how many?

***Jordan Gutterman, MD***

09:21

We only averaged about, most of those patients were either down in 2 West or, but I think we averaged about 15 to 18 patients. But we had really good fellows. We didn't have -- there was -- I mean, I was at Duke when the positions assistant program started, so I was quite aware of it. But we didn't have PAs at the time, although I hired the first PA at MD Anderson, I'll come back to that. And nurse practitioners were just a, you know, vision in somebody's head probably, or nobody's head at that time. But we had fellows. So the fellows were the nurses, the PAs, as well as the fellows. But we had some really outstanding fellows at the time who went on to careers, like [Jean Hiss?] at MD Anderson, or Robert Livingston at University of Washington, and a whole variety of others. So, I was pretty busy.

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***Lesley W. Brunet***

10:14

Sounds like it. So, you were doing BCG until about '76, '77?

***Jordan Gutterman, MD***

10:21

Yeah. Well, that story changed where I began to change directions. You know, at some point, we'll start talking about -- when I went to a meeting on interferon in late March, ironically, 31 years ago, probably today or tomorrow, I think it started the 31st of March of 1975. I'll come back to that, or how I got there. But that was a pivotal, rather serendipitous meeting, where I began to think -- and I'll tell -- I'll explain the science of why I began to think that the use of BCG, although a good start, and taught me a lot, and I still think to this day, probably benefited some patients with acute myeloid leukemia -- I have little doubt about that, and absolutely, certain lymphoma patients. That is, boosting the immune system. I didn't think, because it was a live vaccine and a lot of variability in making it, and there wasn't -- there were no -- there were organizations making it. There was not a drug, as I saw it. And for various reasons, which I'll get into, I thought interferon would be the real first step of establishing something that would affect the immune system as well as other aspects of cancer, and we'll come back to all that. So I worked on that from 1971 'til around '77. Six years. And then I shifted directions completely.

***Lesley W. Brunet***

11:57

You said you went to a meeting in -- was it '75?

***Jordan Gutterman, MD***

11:59

Yeah.

***Lesley W. Brunet***

12:02

What was that meeting? I had this on here.

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**Chapter 02: Meeting Mary Lasker**  
**A: Professional Path**

Story Codes:

C: Formative Experiences

A: The Researcher

A: Definitions, Explanations, Translations

***Jordan Gutterman, MD***

12:04

OK. Well, let me give you a little history of that. Because Mary Lasker was really crucial there. So, I was doing exactly what I told you, and in 1973, J. Freireich and Evan Hersh told me that a woman was coming down here to visit MD Anderson by the name of Mary Lasker. Now I knew who she was, because Freireich had won the Lasker Award in 1972, and I knew about the Lasker Award. I still remember the day he got the phone call on -- what's today, I guess it would be fourth floor, I think it was the third floor, because my office was just down the hall from him when I heard the excitement in his office when he got the call in June. Late June of 1972. So I knew who she was.

***Lesley W. Brunet***

12:58

Did you know who she was from even the '60s, because wasn't she in the heart cancer stroke?

***Jordan Gutterman, MD***

13:04

Yeah, but I didn't know of her, I think, until -- I really didn't know -- I think I'd heard about it vaguely at Duke in training, but not much about it. But when I got here, I began to hear a little bit about this. And of course, when he won the award, that's when I really began to hear about it. But I still didn't know much about her. And then she was coming down to visit her good friend Michael DeBakey. And she was good friends with Lee Clark, because they had worked on the National Cancer Plan. Don't forget, the year I got here was when the National Cancer Plan went into action. And I will come back to all that later, because I had been in conversations with Mary about that. And she worked very closely with Lee Clark and Benno Schmidt and a few others.

***Lesley W. Brunet***

13:48

Benno Schmidt?

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***Jordan Gutterman, MD***

13:49

Yeah. He was a big -- he was kind of the big benefactor of Sloan-Kettering. Benno Schmidt, Sr. I think he was an investment banker, if I'm not mistaken. But she worked very closely with Dr. Clark. To -- with the Nixon administration to get that thing through. And so, you know, I came here at a very propitious time, because the money for cancer research started on the upswing exactly the year I arrived. And so, Dr. Clark, it was from my recall and from what I was told, he selected eight people to meet with Mary Lasker, to give a five or ten minute brief summary of our work. And he picked what he thought were some of the visionaries of MD Anderson. For some reason, I don't recall Freireich being at that meeting. But Evan Hersh was there, and I was there.

***Lesley W. Brunet***

14:46

Do you remember any of the other people?

***Jordan Gutterman, MD***

14:48

I don't remember any of the others. And I don't know...

***Lesley W. Brunet***

14:50

Let's see, 1975.

***Jordan Gutterman, MD***

14:52

3. No, '73. This was '73.

***Lesley W. Brunet***

14:54

'73.

***Jordan Gutterman, MD***

14:56

I could go back and see if I have notes about that. One of the advantages of starting this, but it would be important to go back and see if I could remember.

***Lesley W. Brunet***

15:07

It would be interesting to know.

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***Jordan Gutterman, MD***

15:08

Yeah, it would be really interesting.

***Lesley W. Brunet***

15:09

It might be -- there may be something, a correspondence. I just don't remember offhand.

***Jordan Gutterman, MD***

15:13

I don't think there was. I don't remember seeing it. But I don't know. Do we have access to Clark's records, or...

***Lesley W. Brunet***

15:20

Well, we just sent them off to be duplicated. I have all of Clark's records. Everyone's records on microfiche.

***Jordan Gutterman, MD***

15:30

Are they open?

***Lesley W. Brunet***

15:32

We're just -- we're just about to formally open them, but I've been letting people use them with limitations. Depending on whether there's privacy, whether there's PHI and things like that.

***Jordan Gutterman, MD***

15:50

Well, I still remember, we met in the conference room up there next to his office on the seventh floor, where Becker eventually took -- the big conference room over, the big table? And I remember she sat down on the -- as you're by the screen there, where the screen was, so she was down on the left side at the end, and Dr. Clark was there running the thing. So it was Dr. Clark. And I presented. And I presented the idea, and this is, I think, really, very, very important. Now what was different, what got her interested in talking to me, was that beyond chemotherapy -- and, by the way, just one year before, she had recognized 16 individuals in a very unusual Lasker Award, which, of course, I've been director now of those awards for several years, but she recognized, and we have a restriction of three. But she recognized, it was a special year, of 16 people who she considered -- who the jury considered, or the leadership at the time of Sidney Farber, 16 people who pioneered cancer chemotherapy.



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***Lesley W. Brunet***

17:05

I'm sorry, what did you say about Sidney Farber?

***Jordan Gutterman, MD***

17:07

He was chairman of the Lasker jury at the time. And they recognized 16 people. Now Farber, if I -- I have to go back to verify this. Farber, I believe, had won previously a clinical award for methotrexate in acute leukemia. But this was the likes of Frei, Freireich, Pinkel, Gordon Zubrod, DeVita, Carbone, the list is there, I can get you the list. But anyway, 16 people were recognized, and of course, in part, I mean, clearly, I mean, I know how it runs when she was alive and afterwards, the jury is totally independent. But this had to be somewhat orchestrated, and it was probably in recognition of the fact that she got Congress to pass this plan to really rev up the money, and it was the whole idea of the Lasker Awards, in part not only is to recognize scientists, but to create public awareness of what's out there. Both for personal things -- hey, you can get chemotherapy for Hodgkin's now -- as well as for congressional support. We need more money. So, she used those -- I mean, the Lasker Awards, in part, was the publicity that surrounded them. So she came in that setting now down to MD Anderson in 1973, where chemotherapy was clearly in its plateau phase, in its -- you know, it was really the heart of it, because of the impact on childhood leukemia and Hodgkin's disease and so forth. And I presented a new idea, which I think she heard kind of for the first time, except for one person, and that was -- Edmund Klein was a winner. Issac Djerassi was a winner. Edmund Klein had done some immunotherapy of skin cancers. Not with BCG, but with other antigens that would react to the immune system. So she was not completely -- I mean, she was aware that the immune system -- and I'm going to come back to the fact the immune system is not the primary target of interferon. I thought it was at the time, but interferon wasn't discussed in '73. But I presented to her the ideas of Mattei, and of BCG, and there was a whole additional way of looking at cancer in addition -- I mean, you know, being a little redundant there. And that was immunotherapy. And we had data that the body does recognize AML cells as foreign, but not ALL. This is in paper. And then I presented some material with BCG both in early adults. And we had a paper in the New England Journal on that. I mean, that's a really major melanoma, and in acute myeloid leukemia.

And to this day, I don't -- some of that was already published in both the New England Journal and Lancet, and to this day, I think BCG did clearly help patients with AML, prolonged their remission, and probably helped patients with early melanoma. I mean, Don Morton, who was at UCLA for many years, a surgeon, and now is at St. John's Hospital out there -- I think he's part of Irvine.

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Still, is using BCG with tumor vaccines 30 years later. He was kind of -- Don Morton's program, if you want to call it, was competition or parallel to what we were doing here. So I presented all of this material in a very brief way, and I remember her very well. She had a light powder blue suit on, and so forth and so on, and I was not intimidated by her, but I remember coming over -- she came up to me after the meeting and said to me in a very formal way, "Dr. Gutterman, I was very excited to hear about your work. I would like -- do you ever get to New York?" And I said, well, as a matter of fact, I've been invited -- because my work was starting to get some recognition. I've been invited, actually twice here in the next several months, one to give a talk at New York Hospital at Cornell, and then over at Sloan-Kettering. Lloyd Old has invited me and Bob Good had invited me over at Sloan-Kettering. She said please give me a call, I want to talk to you more about this work. And it was clear that I was singled out among this group. Of course, I was excited beyond get out.

***Lesley W. Brunet***

21:27

You were the only one that she talked to personally?

***Jordan Gutterman, MD***

21:30

Well, I think she was gracious to everybody, but -- and this created a bit of tension.

***Lesley W. Brunet***

21:35

I could imagine.

***Jordan Gutterman, MD***

21:36

With Evan Hersh particularly, because she didn't say anything much to him, she just was nice. But she say -- I mean, she came up -- she went over to the side of the room and said -- she didn't carry cards or anything like that. She just assumed...

***Lesley W. Brunet***

21:50

That you'll know how to find her, right? I'm sure.

***Jordan Gutterman, MD***

21:52

And she said just I want to talk to you more about your work and some other things. So I called her office and told her in early 1974, I believe this was -- and I could be wrong on this, we could try to verify this, this meeting occurred in the fall of 1973.

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***Lesley W. Brunet***

22:15

Oh, I'll try and find out.

***Jordan Gutterman, MD***

22:17

But in early 1994, I gave this talk, and she came and sat right down in the first row of New York Hospital. And there she was. Plopped herself down, and I gave this talk on both tumor immunology and BCG. And again she came up to me and she said, you're coming back -- when are you coming to Sloan-Kettering? She says I'll be at the lecture, and why don't you come over to my apartment, and we'll have a -- we'll meet after the talk. So I returned to New York shortly thereafter, and this was kind of an early recruitment phase, which faded away when Bob Good got into all sorts of trouble after being on the cover of Time Magazine and they found out -- do you know that story?

***Lesley W. Brunet***

23:04

No, I don't. And you mentioned another name besides Bob Good.

***Jordan Gutterman, MD***

23:08

Lloyd Old. He was head of tumor immunology at -- and was quite an interesting -- that's another whole interesting story. He was very close to a woman named Helen Nauts, N-A-U-T-S. Helen's father was very famous, and to this day is well known among some people, his name was William Coley, C-O-L-E-Y. And he was a surgeon in New York, and in the late 1900s -- I'm sorry, late 1800s, early 1900s, we could verify the dates. Developed a thing called the Coley's Toxin. It was a mixture of bacteria, killed bacteria, where he vaccinated cancer patients.

***Lesley W. Brunet***

23:53

What -- I never heard this one. When was this, late...

***Jordan Gutterman, MD***

23:55

Oh yeah, this is really -- this was in the late 1800s, early 1900s. He was a surgeon. And it was a mixed bacterial toxin, basically. But -- it was Streptococcus and various bacteria. And he would immunize patients with different cancers. And he reported -- but it was very anecdotal, and that's why it was hard to accept it. He would report occasional remissions, because this comes back later on with the interleukin 2, which I never got into. I just -- the BCG was, in the sense, a part of this history, of activating the immune system, which myself -- and I'll come back to it later -- other than virus-associated cancers,

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I think that's not a direction that's going to pay off very much. I think, as a matter of fact, much later on, we'll talk about it. I think the work that I'm doing now clearly teaches me that the immune system is probably part of the whole problem of promoting cancer. But that's kind of a counter-intuitive and not a popular way of thinking about it. I think it's a mixed bag. I mean, I think some cancers do depend on a very vigorous immune system. We know that from transplant patients. And that had been known, that patients who get kidney transplants, for example, and are put on immunosuppressive therapy have certain cancers that have a higher instance. So, you can't generalize completely that the immune system is the cure-all and prevention for cancer. And you can't say that also that it's responsible for cancer. But there are certain cancers, particularly virus-associated ones like papilloma and a few others, EBV virus, where the immune system is important in defense against tumors. We know this from conditions like mononucleosis, which almost looks like a lymph cancer, and then it resolves due to the immune system. So, this idea of the immune system was very prevalent in the late '60s, particularly -- it was revived by Mattei's paper on BCG in the '70s. It was a major, major effort in activating the immune system. And it's had several ups and downs and the renaissance's back again with sophisticated vaccines, and some of that will work, but most of it won't, I think. But we can come back to that. So, Lloyd Old, an immunologist at Sloan-Kettering, was extremely passionate about this idea, about the immune system, because he had done studies with BCG in animals in the late '60s, about the same time Mattei was doing it, showing you can prevent cancers or get reduction of cancers. So he was excited about the work of Coley, which was, I think, done at Sloan-Kettering. But it was very, again, very anecdotal. It was very difficult to pin down, and because we've seen this, you know, almost a century later with interleukin 2, you occasionally get these really dramatic responses and nobody, to this day, really understands why. But it's not very common, it's not very consistent. Coley's daughter, Helen Nauts, took up the mantle and formed a foundation, I forget the name of it now. Could be the Coley -- well, I forget the name of it. I'm blanking. She died here a few years ago. And she went through every record of every patient that her father had treated, and she wrote many treatises. But they're all case reports. You know, 71-year old patient who had soft tissue sarcoma received the Coley's Toxin, you know, twice a week, da da da. And had a response. But it was all anecdotal. You had no denominator...

***Lesley W. Brunet***

27:34

There's no comparison. No control or anything.

***Jordan Gutterman, MD***

27:36

No, no. Nothing randomized, nothing -- you don't even have to be randomized, it was just impossible to say what the denominator was and so forth. But there's no doubt these things happen.

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And she compiled these in various reports. She was a lay person. Lloyd Old was very excited about this, and they became good friends, and she formed a foundation, and so when they started recruiting me in '74, they wanted me because I was really, along with Don Morton, a surgeon in UCLA, probably the only people really spearheading the use of so-called immunotherapy in cancer. I was pretty much of a loner along with Morton, and maybe a couple of others, but I was kind of leading the pack.

***Lesley W. Brunet***

28:15

So you were recruited by Sloan-Kettering, or they started to, or...

***Jordan Gutterman, MD***

28:19

Yeah, they started too. And Robert Good, I remember meeting with Robert Good up in the penthouse in '74. And that was going to happen. And Good himself was an immunologist. He was extremely interested in this. When this big controversy, this big thing happened with Summerlin -- do you know the Summerlin affair? Painting a mouse? He was interested in transplant -- I mean, in a way, Bob Good should have won a Nobel Prize, maybe twice. I mean, he really did the first bone marrow transplants, which eventually went to Thomas, which was well deserved, but -- and he won the Lasker Prize, and he was able to define that there were T cells and B cells. And what he was interested was transplantation, and he had this guy, Summerlin, a dermatologist from Louisiana, putting black skin on white mice and suppressing the immune system to get graft acceptance. And he would meet with these scientists early in the morning, when it was still dark out, up in the penthouse. And Summerlin came in one day with a cage of mice, white mice, which he said had accepted the graft based on the immunosuppressive types of therapy they were doing. But, in fact, it was all a hoax. He'd painted the white mice with black marking pen, and that got out -- I mean, I don't know who recognized it. Good had just been on the cover of Time Magazine. We can check that out. And when that broke, I mean, it was one of the first real -- you know, we know about these -- like the stem cell thing recently, these things happen. And this was big, big, big, because first of all, the last thing you want is to be on the cover of Time or Newsweek. Fortunately interferon, many years later, survived being on the cover of Time because it was a legitimate thing. But it was just a few months later. But Good was riding the crest of immunology, and Sloan-Kettering, clearly, was the place to be for tumor immunology and so forth. So I was very excited. But once that happened, it was chaos at Sloan-Kettering, and the whole thing fell apart as far as recruitment. I think eventually Paul Marks came in, but I think, I can't recall right now, there were some interim presidents after Good. I forget exactly how that happened.

***Lesley W. Brunet***

30:45

And was there a reason that you were -- were you not happy here?

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***Jordan Gutterman, MD***

30:52

No. I was OK here. But it was exciting to be around Bob Good, who I thought was clearly going to -- I mean, he was a Nobel Laureate-type person. Lloyd Old was very enthusiastic and brilliant. And I just thought they had more of an infrastructure, of real, good, basic immunology, which they did. And so it wasn't being unhappy here. And I don't know if I would have accepted a position or not. I don't know what they would -- I was -- we never got down to offers. So.

***Lesley W. Brunet***

31:23

Let me just pause here.  
END OF AUDIO FILE 3

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**Chapter 03: The Early History of Interferon Research**  
**A: The Researcher**

Story Codes:

A: Professional Path

A: The Researcher

A: Definitions, Explanations, Translations

D: Technology and R&D

D: The History of Health Care, Patient Care

*Lesley W. Brunet*

00:05

OK. Side two.

*Jordan Gutterman, MD*

00:06

Obviously, well, the other piece that was exciting was the presence of Mary Lasker. I mean, I could see the energy in New York, and of course around Mary, you could just see the energy. Of course, I was fortunate, in a way, that I stayed here, which we'll come back to. It would not -- maybe I wouldn't have had the freedom to do what I've done at Sloan-Kettering, I think, as compared to Anderson, which has always been a great climate for clinical research. It's changed a lot, because of bureaucracy and regulations and so forth. But would I have gone? I don't know. But there's a real good chance I would've. I hadn't really thought about the connection between the Summerlin affair and my not going to New York. But Mary clearly wanted me up there. She -- I mean, it's pretty impressive when Mary Lasker says you need to come to New York. And I think it would have been OK, because I guarantee you, she was a powerhouse.

*Lesley W. Brunet*

01:05

She would have looked after you.

*Jordan Gutterman, MD*

01:06

She would have looked after me. (laughter) I was still quite young, and so forth. I don't think anything bad would have happened, because she struck fear in people, in a sense, in a positive way. Someone once described as sort of like when she walked in the room, it was sort of like a hurricane. Stuff went on. But it was kind of organized stuff.

*Lesley W. Brunet*

01:29

She knew all the movers and shakers.

Jordan Gutterman, M.D., Oral History Interview  
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***Jordan Gutterman, MD***

01:30

Oh, absolutely. So, I remember going over to her apartment and immediately being dazzled by her artwork, which we could talk about later. Oh, yeah. She still had some Matisse and all. She had one of the great French collections in her place in Beekman Place, which she had just sold and she had just moved into the UN Plaza around this time. And sold -- and the collection's in a book, I can show you that book at some time. She had -- that's a whole history unto itself, how she and Albert collected art. And we can go into that history as briefly or as long as you want. And I didn't know anything about art, but that trip to her apartment opened my eyes to art -- and she opened my eyes to color, and form, and art. But she had sold, right before moving, her Cézannes and her Renoirs and her Monets and the list -- and Picassos, and the list goes on. She still had a few Picassos, and then she had nine great Matisse. Nine great Matisse. And we talked about, you know, cancer research, and medicine, and so forth, and it was getting acquainted in '74. And then I went back again for another trip to New York, and again looked her up. I met her for lunch. And then, what happened was, a very pivotal thing, and I'm kind of a mystic, and I think things happen for a reason. (laughter) And, or at least you take advantage of it. But there's some really strange occurrences. My father, who I was very close with, died on April the 7th of 1974 of heart failure. It was also the first...

***Lesley W. Brunet***

03:20

Your father, or your father-in-law?

***Jordan Gutterman, MD***

03:21

My father. My father. And it was also the first day of Passover. And I was there in Norfolk, Virginia. And this was at the time I was being recruited to Sloan-Kettering, and also, since my parents lived on the East Coast, that was somewhat of another incentive to think about New York. And I remember telling them about Mary Lasker, and things, and he was extremely interested. I still remember the day before he died, talking to him about the use of BCG in melanoma and acute leukemia. He was keenly interested in what I was doing, and again, I can come back to my background growing up in a small town in the Midwest, and the value systems, and my father's emphasis on education. Let's -- if you're interested.

***Lesley W. Brunet***

04:05

I think we got some of that on the first take.



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***Jordan Gutterman, MD***

04:10

Now. So he passed away, and I came back to Houston of course. But in the Jewish tradition, it's -- a year after -- approximately one year after a death, you have a laying of the gravestone. It's called an unveiling, really, that's what it's called. And there's many reasons for it. It's not a biblical command. But one of the reasons is that the initial shock of a death is now over, and you've had a time to reflect. And so families get together to re-experience the death a year later. And since Passover, which reflects freedom, and he was a Russian immigrant, was so important to him, I usually went back with my family every Passover. And since he passed away and died on the first day of Passover -- this year, Passover was that year, in 1975, a year later, Passover was early, it was at the end of March. So, I took my family, I had at the time now three children. And went back, and we had a ceremony up at the cemetery right before Passover started. Celebrating his life, and honoring, and remembering, and so forth. And on the second day of Passover -- the day after the second day of Passover, I got a call from J. Freireich. He said there is going to be a meeting on a substance called interferon starting tomorrow in New York City, organized by Mathilde Krim. A key player in this. Lee Clark has been invited and he can't be there. He wants me to go, and I'm not sure I could go. No one seems to want to go, here. Big mistake. And you've been elected, since it is in the area of immunology, and so forth, and you're right there. All you got to do is take a Piedmont Airline -- he wouldn't say Piedmont, but that's what I took at the time. You're one hour away from New York. So would you like to go? Well, I knew a little bit about interferon. I knew that it -- and I jumped at the opportunity. My goodness. I'm right there. And I said I'll be there. Absolutely. Not knowing what was going to happen. And so I arrived on the evening of the -- I think the 31st -- 30th or 31st of March. And Mathilde Krim had with her her husband Arthur, a beautiful townhome on the East Side. He was head of one of the -- Universal Studios, I think it was.

***Lesley W. Brunet***

07:00

I'm trying to think of his name. Wasserman?

***Jordan Gutterman, MD***

07:03

No, Arthur Krim.

***Lesley W. Brunet***

07:03

Arthur Krim. OK.

Jordan Gutterman, M.D., Oral History Interview  
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***Jordan Gutterman, MD***

07:05

Yeah. I think he was a partner of Wasserman and those people. There were two or three of them. Very wealthy man. Big Democrats. They still have a ranch -- I just saw her. She still -- they still have a ranch next to the LBJ ranch. There's enormous Texas connections here. We're going to get into...

***Lesley W. Brunet***

07:18

Oh, oh, I know. Because I know Mathilde...

***Jordan Gutterman, MD***

07:21

Where?

***Lesley W. Brunet***

07:22

I know I used to see her, I can't remember him, when I worked there. And Mary Lasker.

***Jordan Gutterman, MD***

07:28

Where in?

***Lesley W. Brunet***

07:29

I used to work at the LBJ Library. In Austin, yeah.

***Jordan Gutterman, MD***

07:31

Oh that's right, you told me that. So, we'll talk more about that. So I met Mathilde for the first time. Gracious woman. And there were all these people I kind of knew from (inaudible) -- from all over the world. The one thing that impressed me that evening was the international flavor of interferon.

***Lesley W. Brunet***

07:49

And what was Mathilde Krim's position then? I mean, why would she have hosted this meeting, or led it? Was she...

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***Jordan Gutterman, MD***

08:00

She was trained in, I think as a virologist in Switzerland. And then went to Israel, where she did immunology research, or viral. I guess viral research. Married an Israeli, and I don't remember his name, and that ended in divorce. And she eventually found herself at Sloan-Kettering. Interesting how the world keeps revolving around this. And she did interferon research. And she was more of an entrepreneur of research than a researcher herself, although she did some research. And she gets the credit for really recognizing that there was a great potential for interferon as an anti-cancer drug. She also recognized, as I recognized at the meeting, there were emerging technologies that might be able to really do something with interferon, which was a scarce human protein that nobody can make enough of or even purify at the time. So, she convinced a few people, most notably Mary Lasker, that interferon, which -- it became clear in the meeting -- was -- yes, it did activate the immune system. It also can suppress aspects of the immune system. And today, it's actually a fascinating, fascinating immunological regulator. I don't think we've seen the final chapter of interferon research, and what I'm doing now with this plant compound, avicin, I think there's going to be tremendous synergy. I think interferon has kind of waned as I left the field, which we'll come back to, but I'm going to get, eventually, get back into it. Because it's an incredibly interesting regulator. But...

***Lesley W. Brunet***

09:40

What was the name of the plant...

***Jordan Gutterman, MD***

09:41

Avicin.

***Lesley W. Brunet***

09:42

How do you spell that?

***Jordan Gutterman, MD***

09:43

A-V-I-C-I-N. So we got tons of stuff written on that.

***Lesley W. Brunet***

09:48

I just want to make sure I spelled that for the (inaudible).

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***Jordan Gutterman, MD***

09:54

But beyond that, and I'll come back to the dinner in a second, and the setting of the meeting. It became very clear that the interferons not only will inhibit viruses and boost the immune system, although there are aspects of suppressing things you want to suppress. But it had a direct effect on growth of cancer cells. So it was a growth inhibitor. In fact, that's how -- in large part, that's how it achieves its anti-viral effect. I'm probably talking a little too fast, I'm going to slow down a little bit, I think.

***Lesley W. Brunet***

10:25

That's fine.

***Jordan Gutterman, MD***

10:26

Well, I'm thinking of the transcriber. (laughter)

***Lesley W. Brunet***

10:27

Oh, they have a thing on the machine, that'll transcribe the speed.

***Jordan Gutterman, MD***

10:31

Because I -- I could try maybe talk a little -- like I was on TV or something, talk a little more clearly. But so it's more than just an immune thing. But I learned that at the meeting. But back to the dinner the night before in this lovely townhome, and she had convinced Mary Lasker to put some money up and a few other people. She was working with the Swiss Red Cross on making interferon. So, let me give you a little bit of the setting of the meeting. Mathilde's interest in the clinical potential was really stimulated by maybe three people. First and foremost was -- well, her immediate attention was focused on two people. Two Scandinavians. Kari Cantell from Helsinki. And Hans Strander, a radiotherapist from the Karolinska Institute in Stockholm.

***Lesley W. Brunet***

11:32

I'm sorry, what was the second name?

***Jordan Gutterman, MD***

11:34

Strander.

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***Lesley W. Brunet***

11:34

Strander.

***Jordan Gutterman, MD***

11:35

Hans. Hans, Hans Strander. They had been stimulated -- Strander in particular, by Ian Gresser, an American working in France, in Paris, outside of Paris. He was working on tumor models with interferon, and showed a lot of anti-tumor effect. And he felt primarily was due to the immune system, although he knew that they had a direct effect. Cantell had seen the potential for this as an anti-viral substance, and again, there was a tremendous international presence both at the meeting and in the field itself. Interferon had, by the way, had been discovered in 1957 by a Brit, Issacs, who died, actually, of a vascular growth tumor in the brain, and interferon blocks angiogenesis, that's just kind of ironic, but that's not uncommon. DeBakey has an aneurysm. But, and then -- let's see, the Swiss guy -- I'm blanking right now. Issacs and -- well, that's not important. But, Cantell then...

***Lesley W. Brunet***

12:55

Is he Swedish? No. Not Issacs.

***Jordan Gutterman, MD***

12:56

No, the guy that -- Issacs was British, and there was a Swiss guy who was the collaborator on this. I'm blanking right now on this, but I'll think of his name. But, Cantell began to work with the Finnish Red Cross and got blood samples. What he did was the discarded buffy coats from red cells, they had to spin them off, and he began to develop a technique with Sendai virus to induce interferon in human white blood cells. And then to partially purify them with the idea of going to the clinic. And he was really the one supplier in the world for animal -- well, you couldn't do animal studies very well, because he -- because interferon's species-specific. So the mouse work had to be done with mouse interferon. But his whole idea was to get this in the clinic. And he formed a friendship with Strander in Stockholm. And Strander did studies in the laboratory in the mid-'60s showing that interferons stopped the growth of human lymphoma cells and human myeloma cells. That was his primary focus. And human osteosarcoma cells. Those three tumors. So Strander began to do two studies. First and foremost, he took young adolescents who had had surgery, generally amputation, for osteosarcoma, and then they had no other treatment. And he began to apply, in a non-randomized, consecutive way, interferon. Three million units, I think, daily. For a period of time, I don't recall, to prevent recurrence. And he built up a cadre, a small cadre of patients.

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But he announced, and I don't know if he actually published this, but he announced at the meeting, a meeting in around 1974, that he was seeing a decrease in the recurrence rate and a prolongation of survival in these young adolescents receiving interferon, as opposed to the historical experience they had at the Karolinska. Mathilde got wind of all of this, and because she had been doing some studies at Sloan-Kettering and elsewhere, and was really connecting with all these people working in interferon. There was everybody working on this stuff. She said it was time for a meeting. And it was also Mary, who, once she heard something like that, Mary Lasker, said we got to get a meeting. We've got to get moving on this. We got to get these patients. She was very -- she knew that chemotherapy had been effective, but she said we got to have more than chemotherapy, and she particularly was interested, of course, in what she felt was the immune system, which was part of the story of interferon, although not the entire story. So Mary was prominent at that dinner on the 30th of March at Mathilde's, and again, I met all these people that I read about -- and Freireich showed up. (laughter)

***Lesley W. Brunet***

16:09

Oh, after all.

***Jordan Gutterman, MD***

16:10

Yeah, I didn't realize -- and he came, he stayed for the first part of the first day and left. So I was the only one there from MD Anderson. But he showed up for the dinner. He said he wasn't sure he could make it, but he showed up for the dinner, and I still remember that very clearly. And, but if I hadn't...

***Lesley W. Brunet***

16:26

Why do you think he made the extra effort?

***Jordan Gutterman, MD***

16:28

Well, he, I think he knew Mary Lasker would be there, and I think he wanted to have -- don't forget, I was quite junior, and I think that -- I'm sure he made the decision, because he was a very prominent guy, he was a Lasker winner. He wanted Anderson represented, and I don't think Clark had to push him, I think, and I know him today, he will travel -- not very much, but you know, for a friend, or something that's significant. Certainly in those days, he would make those appearances. Just to be around. But I knew I was going to be there and handle the science and so forth, and you know, he still is and has always been pretty much a dyed-in-the-wool chemotherapist. Although very supportive, it's not something he would ever take on himself to really push himself, personally. So he was there at the dinner.

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So then at the meeting, Mary sat in the front row the whole time, and we began, she and I began to talk about what we were learning at the meeting about interferon. So what did I learn from the meeting? Well first of all, I learned again that there was every nationality in the modern world, Japanese, and all over Europe, Russians, Eastern Europe, Western Europe. And Eastern Europe, you know, this was the '70s now. But they were -- there were still some presence from Eastern Europe. And a lot of virologists, and a very, very small handful of people interested in cancer. But mostly virologists, chemists, drug company -- there was a lot of representation from the pharmaceutical industry. And I remember one guy standing up from the Rockefeller -- gosh, I'm tired from my trip -- I had a very long trip yesterday. I went to Nashville...

***Lesley W. Brunet***

18:16

We can cut this short too.

***Jordan Gutterman, MD***

18:16

No, no, no. It's just my brain when I travel like that. My flight -- because the weather here got delayed, and I got back very late last night. So -- I know his name. But anyway, he -- I'll think of his name. He won the Nobel Chemistry Prize for synthesizing complex proteins about six or seven years later. And he gave a talk about how one would chemically synthesize this large protein of 165 amino acids. We didn't know what the sequence was. But what impressed me was the scuttlebutt around that there may be another technique to make this. This was 1975, late March, early April. Because just two years earlier, about the same time almost to the day that Mary Lasker appeared here, when I met her for the first time. Herb Boyer and Stanley Cohen got up at a meeting, I believe up in Cold Spring Harbor or one of those meetings up in the Northeast, announced a new technique of splicing genes together. The early beginnings of recombinant DNA, along with Paul Berg. And I remember talking to a guy that I knew from high school, I also knew down at Duke. His name was William Carter. Carter, interestingly, we had parallel backgrounds. We're both twins, we both became physicians, and we both were the valedictorian at our high school classes in the same town at different high schools.

And he had gotten into working with interferon inducers, which was a big part of this meeting, because Merck had a program using polyI:polyC. P-O-L-Y-capital I, colon, P-O-L-Y-capital C. It's a polynucleotide type of compound that people were interested in, in terms of inducing interferon. Because Merck had a big program in vaccines. Maurice Hilleman, who won a Lasker Prize, had developed many vaccines. So they were really interested in the viruses. And polyIC was presented at the meeting, and it's very toxic. It had a lot of side effects to it. Because they induced a lot of interferon and so forth and so on.

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Carter was interested in finding less toxic inducers of interferon. And he was working, at the time, in Philadelphia. Brilliant guy. And I remember talking to him, and I said, you know, there's this scuttlebutt about this new technique of recombinant DNA. He said, "Jordan, you and I have both been in our grave for many years before anybody clones a human protein. Is that what they called it?" he said. "Cloning? Recombinant DNA?" He says, "There's no chance this is ever going to happen." And to synthesize this, how could you ever commercially make 165 amino acids? The guy from Rockefeller says, but -- he said that's an academic interest, which I did recognize. The only way to go is to get less toxic interferon inducers. That's how we should go.

Well, I have confidence in technology, which has driven science. So -- and I remember talking to Mary, and I still remember -- this is a favorite expression of hers. She says, "Those boys will do it." She says that recombinant DNA, don't you agree? And I said I think it's very exciting. And the company, clearly, knew this. But most of the companies were interested in just trying to make a lot of the stuff by self-culture techniques. Improving, perhaps, on the Cantell stuff. Strander presented his small cadre of sarcoma patients. There was a lot of skepticism because it was not controlled, but it looked good to me. And that's all they presented at the meeting. Later on, I'll tell you about going over there and hearing about the single patient, which is a term I hit around for sure. But so, that was the end of the meeting. And it was a very -- and we can go back, I can go back and look at the program. I think there's books on that program, and if I want to refresh myself on more thoughts, and go back in my notes, because I start taking notes at this time. And -- but the key to it was really Mary Lasker, and after that meeting, we began to communicate more. And probably the two events that cemented our relationship, which eventually got her confidence level both in interferon and in me to put up a million bucks to buy some stuff from Cantell, and this -- a lot of it -- Mathilde Krim really got her interest -- Mary's interest. Mary didn't go to Mathilde, Mathilde went to Mary about interferon. If I hadn't been in Norfolk, I probably would not have gone to that meeting. I don't know. I don't know who would have gone. Freireich may have just gone for the day and that was it. But because of my dad's death, and because of that tradition, I was in the right place at the right time. And so, for that reason, there's a connection for me, which is a very personal, with my father's passing. That it's just interesting. If he had died a week late or a week earlier, I may not have been there. Although it was Passover. First Passover without him, I probably would have been there anyway, because the Passover which came, ironically, quite early that year.

But anyway.



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## **Chapter 04: Making Connections and Issues with Acquiring Interferon**

### **A: Professional Path**

- A: Professional Path
- A: The Researcher
- A: Definitions, Explanations, Translations
- D: Technology and R&D
- D: The History of Health Care, Patient Care
- D: Business of Research
- D: Fiscal Realities in Healthcare
- D: Politics and Cancer/Science/Care

Two things happened. Again, I returned to New York for a New York Academy meeting -- New York Academy of Sciences meeting. In late '75 in the fall. And I had gone back to see -- you know, I'm sorry about this. Good had not tumbled yet. I went over to see Bob Good again. That day. It was shortly thereafter in '75 when this thing -- we'll have to check when the Summerlin thing -- I can go back -- now with Google, it's easy to find these things. But I had been there to see him in '74, but the tumbling -- and now, they were still negotiating with me. And I was definitely thinking very seriously. I remember going over to see him in '75. It was, I think, the fall. At the Roosevelt Hotel was this meeting at the New York Academy of Sciences on interferon. Again, there's a book on this. And I presented, and on the way out of the meeting, I had an appointment to see Good. And in coming into the Roosevelt Hotel was Mary Lasker. And she said, "Oh, Dr. Gutterman" -- we were still formal. "What did you talk about today?" And I said interferon -- I'm sorry. BCG. BCG. In breast cancer, where we had some interesting data. She said, "Breast cancer? Can you help my friend Rosalind Russell?" That -- she was very cryptic. And I said I don't know, I'm coming back. I have a meeting to go see Dr. Good again. She says, "You got to move to New York." I said well I got an hour's meeting with him, and will you be here later this afternoon for the sum-up with Steve Carter? She says, "I'll be here. Let's talk." So I went over, had my interview again with Good. Came back to the end of the New York Academy of Sciences meeting, which was really just more of an extension of what had occurred earlier at the Krim meeting. But this was interesting, New York Academy had decided to do this meeting, which I suspect Mathilde was involved with. And she said that her friend Rosalind Russell, who had years and years of rheumatoid arthritis and been on steroids had a recurrent breast cancer. And she wanted me to have Rosalind Russell come to Houston to see me as a physician. And the only reason I tell this story is because it really got us talking about the frustration, and it was breast cancer that finally got her eventually, to make the decision about interferon. And the failure of what we really had for breast cancer. Not that interferon really was that useful in breast cancer.

So I saw Rosalind Russell, and she raved about how well she was treated and so forth and so on, and I actually had to go to LA to see her once before she passed away. And she did die about a year later.

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***Lesley W. Brunet***

26:47

From breast cancer.

***Jordan Gutterman, MD***

26:49

From breast cancer. And so I got to know her and her husband, Freddie Brisson real well, and so forth. But I also learned that Mary was close to the Hollywood types.

***Lesley W. Brunet***

27:01

Oh yeah, I knew that.

***Jordan Gutterman, MD***

27:02

Yeah. So, that was the end of '75 and '76. And the one day, to kind of cement our relationship, she called me again out of the blue in 1976, I guess it was, yeah. And said, "Dr. Gutterman. I want you to talk to my friend Tanny Polster. I want you to testify at Congress about the use of immunotherapy with chemotherapy, and cancer about the advances outside of chemotherapy. There's going to be a congressional hearing.

***Lesley W. Brunet***

27:41

What was the first name, Polster?

***Jordan Gutterman, MD***

27:43

Polster. Tanny. T-A-N-N-Y. He was a lobbyist for the American Cancer...

***Lesley W. Brunet***

27:47

Is it Nathaniel?

***Jordan Gutterman, MD***

27:49

Nathaniel. He was a lobbyist.

***Lesley W. Brunet***

27:50.29

We have those records.

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***Jordan Gutterman, MD***

27:55

Yeah. You know, it's possible that what I gave you and in my own notes...

***Lesley W. Brunet***

27:58

Well, this -- the Polster name is in the Clark records. This section.

***Jordan Gutterman, MD***

28:03

Well he was prominent. Solomon Garb was another name that came around with times. Talk about all these people. Because these people were really, you know, pioneers. They were really the pioneers and the stagecoaches, you know? The Solomon Garbs. Because, just to go back for a second. Solomon Garb was at this AMC Institute in Denver, a no-place. Actually, Tom Slaga just left there. I've been there several times. Who wrote a little book about the conquering of cancer that Mary read, and got her thinking, hey, maybe we can do this. You know? Just as an aside, her mentality -- I was telling my son this. I don't know if you follow at all the basket -- college basketball, and heard about this George Mason University's in the Final Four, do you know anything about that?

***Lesley W. Brunet***

28:48

Uh, just a little bit, yeah.

***Jordan Gutterman, MD***

28:50

Yeah. But I mean, no small little school's ever beat up the Dukes and the North Carolinas. And I was telling my son that when I was 15 years old, the Holy Grail of track was to run the four-minute mile, and people said it couldn't be done. Remember what Bill Carter said. No one's ever going to clone this. And I just want to give you a taste of my influence of a J. Freireich or a Mary Lasker. These are giants, because they said it can be done in a realistic way. And I suspect that was part of my own nature, but these people influenced me. So, when Bill Carter said we're going to be dead before anybody clones interferon, so they said this about the four-minute mile. And the interesting thing is, once Roger Bannister ran that four-minute mile on May the 6th, I think it was, 1954, within a week, people who were running it 4:02, 4:03, or 4:04 broke the four-minute mile. It was a psychological barrier. The same thing's going to occur in basketball. Once a little school like that makes the Final Four, the other players, the schools, are going to think this is doable.

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Well, with Mary, conquering cancer is doable. If we put the resources and the energy and the concentration on it. And -- but she needed to get Congress involved. So she had -- you know, it's like a big chessboard with her. So I didn't have a clue what she was talking about. So Tammy calls me up and for months, then I worked on a document about the use of immunotherapy, what was now going on with other vaccines like *C. parvum*, which is another bacteria. I sent it to her, and she was, "This is fantastic." And I testified, and I did like doing this, and I do speak well, I think, to lay groups, and I can explain complex things in rather simple terms. And she got rave reviews from the Senate. This was very exciting.

***Lesley W. Brunet***

30:44

Was it a certain subcommittee, or a...

***Jordan Gutterman, MD***

30:46

Yeah, the Appropriations Subcommittee on Health. Right. So I remember the Senate committee, Ted Kennedy came in. I took my two oldest kids at the time on a cold, cold April in 1976 -- this was a year after the meeting. Man, was it cold up there. We didn't dress properly. But I took my kids, they were about nine and ten, and they were in awe. You know, there's -- Ted Kennedy walks in, and these other senators. We can go back and look and see who's on the committees. And my testimony is in the records. And so I testified. I didn't read the whole thing, but I testified, and I was quizzed. And she -- I mean Polster...

**END OF AUDIO FILE 4**

***Lesley W. Brunet***

00:03

OK. Let me -- we ran out of tape there just for a minute. You were saying that you also spoke to the House, or?

***Jordan Gutterman, MD***

00:09

Yeah, I also spoke to the House.

***Lesley W. Brunet***

00:11

It was quite a difference.

***Jordan Gutterman, MD***

00:12

Yeah, well, quite a different story. But -- and then in '76, I began to learn about how Mary dealt with the Congress to get increasing amounts of money for appropriations.

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So she dealt with the HE -- I guess it was the time, the HEW's subcommittees and Senate. And she also dealt with the big appropriations committee. I mean, she was very tied in with Warren Magnuson, who I think was -- and she said those boys, as she always called these people, have more power in their little finger. She said they could put 50, 100, 200 million dollars. Think about what we can do with a wave of the wand. And so, I went with her that -- before the things were marked up, that summer and fall, before she went away to Europe and then later in the fall. That spring, a little bit that summer -- early summer, and then before they marked everything up, before the budget came out in October, which is always delayed, and went around and talked to virtually every senator and every congressman. I'd have to go back over my notes and if it's important to document who all those people were.

***Lesley W. Brunet***

01:24

Now was it just to get more money in general for cancer research?

***Jordan Gutterman, MD***

01:27

Yes.

***Lesley W. Brunet***

01:28

So it wasn't a specific project or anything.

***Jordan Gutterman, MD***

01:29

Well, more money, but she was pushing the immunotherapy button. That there was a new -- because it was, you know, this so-called non-toxic -- and then it was kind of natural, you know. And she did put the -- put money -- I remember she worked very closely with Claude Pepper on the House side to have a meeting -- and I got to -- and I do forget about this. She wanted a meeting in Washington where the congressmen would be exposed to immunotherapy. And I'm trying to remember, I think there was a meeting of some sort. And I can't remember now, in Washington, that she got Mathilde involved...

***Lesley W. Brunet***

02:08

Lister and...

***Jordan Gutterman, MD***

02:10

What's that?

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***Lesley W. Brunet***

02:11

Was Lister Hill involved?

***Jordan Gutterman, MD***

02:12

No, he was not. He was gone.

***Lesley W. Brunet***

02:13

Or was that before -- OK.

***Jordan Gutterman, MD***

02:14

No, he -- yeah. Lister Hill was big in the early days. And...

***Lesley W. Brunet***

02:19

Trying to think of the other people, like -- that went with this time, Warren Magnuson, and...

***Jordan Gutterman, MD***

02:26

Well, let's see. Well, Hubert Humphrey. Huge. I met with Humphrey in '76, that was interesting, because he was from South Dakota, he was a pharmacist. And I grew up in South Dakota. He was from Doland, South Dakota, and lived in Huron. So, he had already had his bladder cancer. It was before he got the classic appearance of losing his hair. So I went to see him -- Humphrey was big. Kennedy, I went to see Kennedy, and I got to go back and think about who all the senators I saw. And then I remember in the House, I had Claude Pepper for sure. And -- oh, Daniel Flood was big. She didn't like him at all. But what a -- he had this handlebar mustache. What a character he was. But he was big. I think he was head of the committee in the House.

***Lesley W. Brunet***

03:17

I'm trying to think, Lindy Boggs? Hale Boggs?

***Jordan Gutterman, MD***

03:20

No. That was later.

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***Lesley W. Brunet***

03:20

That was before -- oh, it was later.

***Jordan Gutterman, MD***

03:21

No. She came later. I'm sure it's in my notes. I do keep records of this stuff. I have records of all that stuff. So I got to go back. What's that?

***Lesley W. Brunet***

03:32

That -- I get very excited when I hear about all of these -- people have kept their notes from these very important historical periods.

***Jordan Gutterman, MD***

03:38

Well, I'll have to go back. I have some stuff in storage in my building, so I got to go back and get some of these notes out and look at my written -- I kind of summarized everything, but you know, condensed everything in kind of in a book form. So I got to go back, and this is good. I'll do it as soon as I can. But, so, I did that a lot in '76, in '77, so, you know, she and I got to really know each other. Now we were first name, of course, and all this type of thing. And we were talking about interferon.

***Lesley W. Brunet***

04:11

And how did the people here feel about your very public stance, and involvement with the philanthropists and politicians?

***Jordan Gutterman, MD***

04:27

Oh. Positive. Because Dr. Clark was very involved. He loved it. He loved it, because this was a time of great popularity of getting Washington -- because of the Nixon, you know, because the cancer -- the National Cancer Plan, and promoting more money. I'm not sure internally, again, I don't know how Evan Hersh felt, but I'm sure he was not particularly happy, because he was at that meeting on the eight of us, and she selected me out. And that's the way she did it with people. She would select someone out. She did it with Sidney Farber. She did it with Mike DeBakey back in the '40s. And she would pick individuals. Sometimes right, sometimes wrong, but someone that she intuitively felt -- and it was almost instantaneous, that she could relate to and that would respond and that she could groom to work with her. To do -- to carry about many of the things.

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So in my case, it was not only, as it turns out, the clinical work and so forth, but it was on a national scene was well. And it was all intuitive. And I could describe for you what I think were the characteristics that she was drawn to. But I won't do that right now or maybe ever. But passion was one of them.

***Lesley W. Brunet***

05:44

I was just thinking that, passion, and...

***Jordan Gutterman, MD***

05:46

Intensity, and...

***Lesley W. Brunet***

05:48

Ability to get things done. And certain rapport.

***Jordan Gutterman, MD***

05:55

Yeah. Yeah, absolutely. I mean, here's a woman that would call you at any time, day or night. And you had to be on all the time with her. And it was very exciting. So we did that in '76, in '77, and that went on 'til she had her stroke in '81, I think it was. On an annual basis. The glamour of it wore off a little bit and became a bit of a chore later, because it was so difficult. But I went with her a lot. The one on one -- I mean, I did testify three or four years in a row, but the thing that was time consuming, but I did it a lot, was going with her, and she arranged for three or four or five members of the Senate or the House -- usually one or the other, because -- and we go, and we'd have to sit sometimes while they were on the floor or something, waiting for a vote, god knows what. And she would just sit on these hard benches. Of course, we had a lot of time to talk about all sorts of things. But mostly about her life, and about -- and then we, obviously, we're talking about interferon, and we began to plot, so to speak. And she said, "You know, the NCI needs to do something here." And she really had big problems with the, I guess, now-director of the NCI, which was Vin DeVita. Who made -- who was really a protégé of Frei and Freireich, frankly. But that's beside the point. He was famous for MOPP and Hodgkin's, which I think was Frei's idea, and that was really Tom Frei. But when Frei and Freireich came down here, DeVita and Carbone published the stuff in the Annals of Internal Medicine. I think in '69, the year I got to San Antonio, and received a lot of the credit. I've heard that most credit really should have gone to Frei and Freireich, who conceived the whole idea, really, of combination chemotherapy.



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And the NIH did have a budget -- and I got to go back over my notes in this. But they had some commitment to viral -- anti-viral research. There were several people, George [Glasser?] and all sorts of other people who were working at the NIH in the arthritis and viral institute or whatever it's called, for viruses. But the idea of interferon for cancer was quite foreign. And she kept saying that we really got to get them going. But she got completely -- I mean, they didn't want to listen to her. She went down to Washington, I believe, talked to DeVita and other people about getting money -- and Krim, as well. And that was in part the reason for the '75 -- initial '75 meeting, the national -- the New York Academy of Sciences meeting, and I believe there was one meeting in Washington which I'll have to go back, '76 or '77. But it was the Krim meeting was the historical one. And I remember, finally, in the spring of '77, sending in a proposal. Oh. I think there was a call -- what do you call, RFDs, or what -- RDF...

***Lesley W. Brunet***

09:04

RFP.

***Jordan Gutterman, MD***

09:05

Call for proposal. RFP. For interferon. Proposals. And I sent a proposal in to study breast cancer. And unfortunately, to this day, I can't -- do not know what happened to the critiques. Someone has to take only my memory in trust. But among the comments were that this will never work, this is a crazy idea -- but this is not the only time I've heard this from NCI, so -- later on. They did approve a small amount for study. They had the Cantell interferon for viruses, and they approved a paltry amount to give. I think enough for one or two patients. From the NCI. But it was trivial. It was...

***Lesley W. Brunet***

09:53

So it wasn't a million. Or something.

***Jordan Gutterman, MD***

09:54

There was no money. It was going to give -- they were going to send me for maybe three or four patients, and it was even unclear as to when this would arrive. They had a commission, the Finnish Red Cross, to make some of it. But there was a tentative agreement, I think from pressure from Mary Lasker, they would give me a few, you know, hundred million units. It was enough to treat a couple of patients. It was trivial. She was...

***Lesley W. Brunet***

10:19

But you were the only -- were you the only one getting any at all?

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***Jordan Gutterman, MD***

10:23

I think so. I don't think anybody else was presenting anything for cancer. Nobody was paying any attention to this at all. Nobody. Other than Strander. And that critique, I still remember. It was really biting and very sarcastic. This is a crazy idea, there's no evidence this works. The few patients with osteosarcoma that Strander presented is a figment of his imagination, and this type of thing. She was irate.

In August of that year, 1977, we didn't go on vacation that year because my wife at the time delivered a fourth child who was born in October of '76, so he was ten months old. It was a hot, hot, hot mid-August day in Houston. I got this phone call, it was Mary Lasker. And again, directly, she said [Redacted] Will you go to Stockholm to see Strander and Cantell and get some interferon? That was the question.

***[Redacted]***

***Lesley W. Brunet***

12:05

Oh. So that's when you got...

***Jordan Gutterman, MD***

12:06

"Are you willing, if I give you a million dollars, to work on interferon?" That was it. Very direct. No small talk. Right to the point. I said, absolutely. She said, I'm going away soon. I'm devastated about [Redacted]. She has this friend over at Sloan-Kettering who's going to give her some chemotherapy, but we've got to get her some treatment, and we've got to get all these other poor folks who are just like [Redacted]. Chemotherapy is not working enough.

We've got these new ideas. This interferon, we talked about it, we got to do it. Come see me this fall. I'm going away to Italy -- or, excuse me, a little bit to Venice, and then on to the south of France. And I'll be back in late September. Come up to New York, we'll talk about it, and could you arrange a meeting with Strander and Cantell -- who I'd met at the Krim meeting.

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So I arranged all that. And on October the 12th or 11th, I flew to New York to meet with her. And I remember going to this hotel, and I guess I was a naive traveler at the time, but we didn't guarantee the reservation, and I didn't have any hotel. It was fall in New York, which was very popular. So I eventually found a place to stay, and went over to her apartment the next day. It was at the 12th of October. And we spent -- we had lunch together, and spent the afternoon. Again, I was dazzled by the paintings. In fact, part of the problem was I was in her living room, kept looking at this painting by Sam Francis, who I came to be -- he's a great American painter. I came to collect and be a friend with and so forth and so on. I couldn't take my -- no, no. It was -- let me think a second. I'm sorry. It was not Sam Francis. It was a guy named Paul Jenkins. And as we were talking, she says you keep looking at this painting, I said these colors are just dazzling my eyes. And she says, well, when you get back from Europe, we'll come up and we've (pause) -- we got to go see his art. And there's another man I want you to meet. It's the work of Sam Francis. I just was out there, and just got a painting by him, and I think he's the greatest colorist since Matisse. So I got very excited about art.

***Lesley W. Brunet***

14:37

So is that why you're big on color.

***Jordan Gutterman, MD***

14:38

Yeah. And so, and she said, I'm willing -- I'll put a million dollars. But let's try to negotiate a really good price, and so forth. And so, Kari Cantell had agreed to meet with me and Strander at the airport in Stockholm on the -- would have been the 13th of October. Which was a Thursday, Thursday morning. So I flew over all night, met them -- you know, I got in the next morning. And I was met there by a very controversial, complex, but historically I have to mention this. She didn't really contribute much, but I was met by Mary's friend at the time, which was a very delicate issue. Dita Blair. Do you know that name?

***Lesley W. Brunet***

15:31

No.

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***Jordan Gutterman, MD***

15:33

OK. Her official name is Mrs. William McCormick Blair. (laughter) Whole story unto itself. I can get into the short story, or the intermediate story of who she was, but her husband was Adlai Stevenson's law partner. All these connections. And she -- her husband, since Mary was very close to Stevenson, in both the '52 and '56 elections, dated him, she met Bill, who was single. And somehow met Dita, was her name. And put them together. And they got married, I think it was in Copenhagen -- he -- during the Kennedy administration in 1960, being Kennedy defeated Stevenson, but I think he was paying off some of Stevenson's people to get him on-board. So he made Blair the ambassador of both the Philippines and to Denmark. He was a career diplomat, really. He wasn't...

***Lesley W. Brunet***

16:39

Oh. I was to say, not at the same time.

***Jordan Gutterman, MD***

16:41

No, no. First Philippines, but I think they were in Denmark when they got married in 1962. He was considerably older, he's still alive, than she. She was quite a glamorous woman at the time. And Mary needed an ally in Washington. She went down there all the time, and they were very social. He came from a very wealthy family, you can tell, from Chicago. So the name McCormick tells you right there, and the Blairs. So he came from a very prominent socially, Democratic family in Washington. I don't want to get too far off the track, we can come back to her later. But they became allies, and they had a beautiful home on Foxhall Road, one of the most prominent places in Washington. So when Mary had her team in Washington, she stayed at the Blairs, and she entertained there a lot. So they kind of helped her out. Just as an aside, toward the end of her life, they had a huge falling out. I'm not sure I want to get into it, but there was kind of a parting of the ways. She still is close, but she was kind of her right hand person, in a way, because Mary wouldn't travel like things like this. And she and I did work, to Dita's credit, she did work behind the scenes with Mary to kind of help things. And she kind of represented the Lasker Foundation. I mean, I was not a trustee, I didn't become a trustee until 1982. And I was still pretty new in the game, young and so forth. So in a sense, she represented the Lasker Foundation and Mary. And she was in Europe, and met me in the airport, and came to that meeting. And she was helpful, I mean, there was no doubt she was helpful. And we talked a lot, and they agreed, and I again need to go over it with my notes. They agreed -- Cantell desperately wanted someone in America to pick up the mantle of cancer, to really put this in more critical -- because nobody was listening to Strander. He was a radiotherapist, he was very low key. The osteosarcoma study was just a small number of patients. He was not very eloquent. And I think he could realize that the Lasker Foundation could put the clout and buy the interferon.

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We could find out once and for all. And the only other person at that time who was also working, in a tiny, tiny way on cancer, was a prominent virologist at Stanford by the name of Tom Merigan. M-E-R-I-G-A-N. I didn't know him at the time, I came to know him soon thereafter. Tom had been working in hepatitis, and frankly, does not get the credit that he deserves, because he had done a lot of pilot studies with the Cantell interferon in viral hepatitis. Hepatitis B. We didn't know about C at the time. And done a lot of studies and showed some really definite effects in the '60s. I mean, he was really probably the first clinical virologist working with interferon. There was a lot of beautiful work going on in virology, but from a clinical standpoint, at Stanford. But he had tiny amounts, and I don't recall precisely -- I don't recall at all how he got money to buy the small amounts of interferon. It was sort of like what NCI wanted me to do with breast cancer, treat three patients. So he had some -- but he had experience. But around this time, when he heard that we were starting, he did treat three lymphoma patients with cancer. But that was a very tiny operation. So Cantell was really keen on doing this. MD Anderson, the Lasker Foundation, I mean, what better situation? The stuff was very expensive. It was \$50 per million units. So each shot of 3 million units, which was the dose used in the sarcoma patients, was \$150.

*Lesley W. Brunet*

20:42

\$50 for what, one...

*Jordan Gutterman, MD*

20:44

One million units. And a dose -- this was done in units, rather than milligrams or protein, because it was only 1% pure as we later learned. The stuff that was being made by the Finnish Red Cross was only 1% pure. But nobody had pure interferons at the time. We'll come back to what happened later, I guess. So we're probably going to end with this, and then we could pick up the trips to the companies, the purification, the cloning, and all the publicity that came from the American Cancer Society, that's kind of the second phase. I think this got a minute, we'll end with this, because once we started the studies, it started a whole array of things.

So Cantell agreed he would sell it at half price. Probably cost. Or close to cost. But he was so -- I mean, I still remember this. This was bigger than any CIA or war secret. Nobody must know that this was \$25. That he's going to give us half price. Because he couldn't really afford to do this. But he really wanted this to work, and he knew we could treat twice as many patients, or half to spend half as much money, either way. But he agreed, and I remember this very clearly on that Thursday morning in Stockholm, on the 13th of October, saying -- and this was a big deal, because to go from \$50 to \$25, because of the expense was just cut in half. And Mary's way of looking at it is we could treat twice as many people for the same amount of money, because she'd already sell -- and she sold some paintings. She sold a Matisse, and she sold a -- oh. Japanese painter. I'll think about it. But she sold some paintings to raise the money.

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In fact, Mathilde just reminded me of this when I saw her last September at a reception for DeBakey at Ann [Basse?]'s house in New York. We were reliving the days of interferon, how -- Fujita was the guy, his name. She sold some Fujita paintings. The Japanese guy working in Paris, as well as Matisse, to raise the money to give for the interferon. And it's not that she couldn't have, you know...

***Lesley W. Brunet***

22:54

She didn't have it in her bank account?

***Jordan Gutterman, MD***

22:56

Well, I was going to say it's not that she couldn't move it around, but I think her way of operating was, you know, these paintings on the wall are worth money. They're beautiful paintings. And she was using the money to live and support whatever else she was doing. I mean, she giving money -- not big amounts, you couldn't, to Congress, but she was supporting little things like that. So her way of doing it was to compartmentalize it. And by the way, I'm probably going to do the same thing, because I collected a lot of art. And I don't have a collection like she did, but I'm thinking, I'm probably -- just as an aside, I may well have to do that with my own work now, to kind of unglue it to get to the clinic. And I learned from her you could do that. I mean, that's something -- if you can do something like that. But that's what she said. She sold the paintings to raise the money, and I think she literally did. I know she sold the paintings, and she used the profits from those paintings so that -- I think she was in kind of equilibrium, you know, in terms of her bonds and her stuff, yeah. I'm sure she could have moved a million around, but when she died, the estate was only \$20 million, which included property.

***Lesley W. Brunet***

24:09

What was it when he died?

***Jordan Gutterman, MD***

24:11

I don't know. That's a good question. It was nev -- I mean, in those days, that was a fair amount of money, certainly when he died.

***Lesley W. Brunet***

24:19

That was a lot of money in the '60s.

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***Jordan Gutterman, MD***

24:20

Let's say \$8 million when he died in '52. I'm just -- arbitrary. That was a lot of money. \$20 -- well, when she died in 1994, now, she -- the estate was \$20 million, which includes the home. Two house -- the apartment in New York and this eight-acre estate in Greenwich, Connecticut. So, a lot...

***Lesley W. Brunet***

24:40

Was she -- she gave a lot of it away?

***Jordan Gutterman, MD***

24:42

Yeah. So, she stayed in equilibrium. So \$20 million, which included the real estate, I mean, she didn't have...

***Lesley W. Brunet***

24:52

Oh, she's almost poor.

***Jordan Gutterman, MD***

24:53

What's that?

***Lesley W. Brunet***

24:53

I said she's almost poor. I mean, for...

***Jordan Gutterman, MD***

24:57

Yeah, yeah, no, I know. And she lived a very glamorous sort of life. I mean, she had housekeepers...

***Lesley W. Brunet***

25:01

Oh, yeah. She hung out with Lady Bird all the time.

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***Jordan Gutterman, MD***

25:04

Oh yeah. And this type of thing. So, you know, again, I'm sure she could have come up with a million, but it was just easier to say compartmentalize. This is for interferon. And that was legitimate and so forth. And so it was one million less that she left for the Foundation and this thing. And -- now the next day on Friday, the 14th of October, I went over to spend the day with Strander over at the Karolinska Institute. And he showed me one patient that I could see the future. He introduced me to a man -- first of all, he showed me his cell culture data with lymphomas. And myeloma, which are both B cell tumors. And you could see the growth inhibition directly. It had nothing to do with the immune system, you just plop the interferon in the cell cultures with these cell lines and the growth stopped. And then he pulled out this chart and introduced me to this patient with multiple myeloma, which has a nice marker, it's called the M protein. You do what's called a serum electrophoresis, and there's a peak, big peak that is the myeloma clone of cells. And over the course of several months, you could just see this diminish. And the X-rays get better in the bone, and the patient would feel better, and so forth. And so this was a patient with a myeloma who had nearly a complete remission, not a complete remission. And it fit the in vitro data.

***Lesley W. Brunet***

26:34

I'm sorry?

***Jordan Gutterman, MD***

26:35

It fit the laboratory data. He had a second patient where he said -- he thought was beginning to respond as well, and showed me that. And that's all I needed, because I could see the fact that this was -- in the laboratory, it was blocking the proliferation of these B cells, these antibody-forming cells. And by the way, that is -- you know, I said this is immune stimulant, and it is. It does activate the immune system, and also suppresses -- and these myelomas and lymphomas are cancers of the immune system, they're B cells. It's a lymphocyte. So when you're suppressing the growth of those abnormal B cells, you're suppressing the immune system. So the interferon was both active -- activating aspects of it, but also suppressing abnormal overgrowth of the immune system. That's what I'm saying, and I think this -- all this stuff with vaccines, one has to be very careful. You know, it's very complicated, the immune system is really complicated. But that's all I needed. I saw this, the result from this one myeloma patient, and I knew for sure that we had something that would work in patients. I mean, this was remarkable. I mean, truly remarkable, because -- I mean -- but the thing it reminded me somewhat of was steroids or cortisone, which is really not chemotherapy. It's a hormone. That's what interferon is, it's a hormone, if you will.



Jordan Gutterman, M.D., Oral History Interview  
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That -- for the immune system to defend, probably, against viruses, that's probably how it evolved. But you could see -- and viruses won't grow if the cells aren't growing. Viruses hijack the cells to get their energy. So I think part of the anti-viral stuff had to be something that would block the growth of cells where the viruses would latch onto, and they love B cells. That's where you get Epstein-Barr virus. They latch onto B cells and T cells, which we later learned about the interferon.

So, that was very exciting. We went to dinner. I think Dita joined us that night. And then I -- now. There was a meeting on immunotherapy being held on the 16th of October in Rome at the -- there is a thing called the Pontifical Academy of Sciences. They were having a meeting on immunotherapy of cancer, which was just beginning to emerge now, a topic. Strander was going. I decided to go to -- it was in Rome, of course, but I decided, for some reason, went to Copenhagen for Saturday, spend the day there. I just wanted to see Copenhagen. It was a terribly rainy day, it was my birthday too. I turned -- this was 39, that day. So I spent kind of a dismal day in rainy Copenhagen on my 39th birthday. And then flew into Rome, Strander came to the meeting. He again presented his osteosarcoma patients, but he also presented his two patients with myeloma. Nobody took much note of it. Everybody's pretty skeptical. This Edmund Klein was there, the guy that won -- one of the Lasker Award winners. He was from Roswell Park in Buffalo. The dermatologist who leaped into immunotherapy very passionately for skin cancers. And I was there to present the BCG data. It was organized, I think, by William Terry, who was in charge of now what was now becoming known as the immunotherapy program at the National Cancer Institute. So, you could begin to see now, starting in 1971 with the BCG, which began to get a lot of attention, from Sloan-Kettering and so forth. Then this interferon meeting. And now this immunotherapy meeting, organized by the NCI at the invitation of the Pontifical Academy of Sciences in Rome focusing on this. It was beginning to be a field. It was beginning to be developed. And interferon was just a tiny little piece of it. No one believed Strander. And Merigan was there, because he was a virologist. This was primarily focused on cancer.

I remember getting sick at that meeting. I ate something -- I didn't realize Italy was like Mexico. I ate some -- an apple I think, a piece of fruit off the table, and just had terrible...

***Lesley W. Brunet***

30:48

I didn't know it was like Mexico.

***Jordan Gutterman, MD***

30:50

Well, I don't know if it is today, but I got sick. All I know, I got sick. And I missed part of the meeting, because everybody got an audience with the Pope. I forgot which pope it was. I remember I had a Catholic secretary, Sue Brillhart was her name, and she had given me...

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***Lesley W. Brunet***

31:05

A rosary?

***Jordan Gutterman, MD***

31:06

Yeah, to be blessed by the Pope. And I called her, I said, "Sue, I can't make it." Oh my god, she was devastated. [Redacted]

**END OF AUDIO FILE 5**

***Jordan Gutterman, MD***

00:02

So we're going to finish up in a minute. So, I flew back very excited. I had a commitment from Cantell for half the price. I knew I had to get a protocol written and this and that. But there was an IND at the NCI -- at the NIH, excuse me, for viruses. I mean, Merigan had one. So Cantell interferon had already been given to a few hepatitis patients here. So -- and they didn't fall over dead. So, I knew this was going to be relatively easy. I think we're going to stop there. So, I came back from that meeting very, very excited. A, we got interferon for half price, which was such a big deal. We knew we could get twice for the million bucks. I knew I could write a protocol. And Mary wanted it on breast cancer, specifically. We added -- I convinced her that lymphomas and myelomas were important, because I didn't know about breast cancer, but I knew about -- I mean, I'd only seen one patient, but since the in vitro stuff with myeloma tracked with these one or two patients, and the lymphoma stuff looked fantastic. I said I want to do all three tumors. As a backup. I don't want to put all my eggs in one basket. [Redacted]

And so, I think we'll leave it there. I got back here toward the end of October then, ready to start a chapter of my life that I didn't know where it was going. And meanwhile, there was no -- nobody knew about this, and I'll get to where the companies were. There was very little activity going on yet. It was all kind of in the closet.

***Lesley W. Brunet***

01:39

And did the institution want its overhead costs?

***Jordan Gutterman, MD***

01:43

No. Not a penny of Mary Lasker's money ever passed through MD Anderson, or later, I'll get into that story of the oil industry, which is truly fascinating. Not a penny of that money ever went through here. That's where I began to get into trouble.

Jordan Gutterman, M.D., Oral History Interview  
March 29, 2006

***Lesley W. Brunet***

01:58

Well, they like that overhead money.

***Jordan Gutterman, MD***

02:01

Oh, they never saw a penny of it. It went directly to Finland. It was just buying -- all they did was they bought the fuel. And I'll get into the Clayton Foundation for Mr. Davis, but the publicity that Mary started, it's just a story that gets -- it picks up interest.

***Lesley W. Brunet***

02:17

And it is a whole lot of press. We have the clippings.

***Jordan Gutterman, MD***

02:22

Well, this didn't start 'til the fall of '78, and there was a whole story of Mary Lasker, my fear of the press, ACS. But we'll get into all that, how that was orchestrated, how that all happened, and how this led to the -- interferon foundation...

***Lesley W. Brunet***

02:35

And this is the same time where Clark is giving way to LeMaistre, and...

***Jordan Gutterman, MD***

02:40

Yes. In '78.

***Lesley W. Brunet***

02:42

And other things going on here that probably affected it too.

***Jordan Gutterman, MD***

02:46

Not yet, not quite yet. Because, I mean, he was stepping down, but in '77, he was still there, because he went to Cuba later, we'll get to that. I don't know when, but...

***Lesley W. Brunet***

02:55

Yeah, I have a picture of that.

Jordan Gutterman, M.D., Oral History Interview  
March 29, 2006

***Jordan Gutterman, MD***

02:57

So, I think that's a good chapter one. That kind of leads to the background of how I got to Sweden and brought back the interferon. I probably missed some things, but this relationship primarily with Mary, helped in a way by Mathilde Krim about being in Virginia and meeting her in the first place thanks to Clark, and then Freireich and all this type of thing. So I think we'll stop it there.

***Lesley W. Brunet***

03:22

OK. Thanks. Thanks for taking the time today.

**END OF AUDIO FILE 6**