We're ready to roll.

Okay.

We are rolling. Okay, I’m Tacey Ann Rosolowski, and today I’m interviewing Dr. Gerald P.
Interview Session: 01
Interview Date: June 19, 2013

Bodey Sr. for the Making Cancer History Voices Oral History project run by the Historical Resources Center at MD Anderson Cancer Center in Houston, Texas. Dr. Bodey was first interviewed on March 2, 2003 by Lesley Brunet. Dr. Bodey came to MD Anderson in 1966 as an associate professor of medicine and associate internist in the department of Developmental Therapeutics. In 1995, he retired as chair of the Department of Medical Specialties. He also served as the chief of section of infectious diseases in the Department of Infectious Diseases, Infection and Control, and Employee Health. He is now an emeritus professor of medicine. This interview is taking place at Dr. Bodey’s home in The Woodlands near Houston. This is the first of two planned interview sessions, and today is June 19, 2013. The time is 1:28. So thank you, Dr. Bodey, for agreeing to participate in this project.

_Gerald P. Bodey Sr., MD_

0:01:09.3

My pleasure. I hope I have something intelligent to say.
Chapter 01

A: Educational Path

Education Leading to Work with J Freireich at the NCI

Story Codes
A: Personal Background
A: Professional Path
A: Military Experience
A: Inspirations to Practice Science/Medicine
A: Influences from People and Life Experiences
A: Faith
A: Overview
A: Definitions, Explanations, Translations
A: The Researcher
A: The Clinician
D: Understanding Cancer, the History of Science, Cancer Research
D: The History of Health Care, Patient Care

Tacey Ann Rosolowski, PhD
0:01:13.3
Well, before we turned on the recorder—first let me ask you kind of the basic oral history questions—you know—can you tell me where you were born and when?

Gerald P. Bodey Sr., MD
0:01:23.2
I think I can.

Tacey Ann Rosolowski, PhD
0:01:24.1
Good.

Gerald P. Bodey Sr., MD
0:01:25.2
I was born in Hazleton, Pennsylvania, in 1934. My father was a minister and had been assigned—had been working there in Hazleton, but he was assigned to go to Bangor, Pennsylvania right at the time I was born. So I was born in Hazleton and he was down in Bangor.
And did you end up moving down to Bangor?

Gerald P. Bodey Sr., MD
0:01:52.9
Well, yeah, the family was headed that direction. My birth was just kind of a temporary obstruction. So we lived in Bangor for eight years and then went to Allentown for another eight years, and then to Bethlehem, at which time I graduated from high school and attended Lafayette College.

Tacey Ann Rosolowski, PhD
0:02:15.0
Now, I read that you attended Lafayette College in Easton, Pennsylvania.

Gerald P. Bodey Sr., MD
0:02:19.9
Yes, I was there from 1952 to 1956.

Tacey Ann Rosolowski, PhD
0:02:24.0
And why did you attend that particular college?

Gerald P. Bodey Sr., MD
0:02:27.6
Well, my older brother had gone there. It had a very good reputation. It was a smaller college, but it had a very good reputation. And if my memory serves me correctly, our physician’s son had gone to Lafayette, and he also had recommended it to us. My brother had a very good experience there, and that sort of encouraged me to go there.

Tacey Ann Rosolowski, PhD
0:02:58.6
Did you live at home or did you live on campus?

Gerald P. Bodey Sr., MD
0:03:00.2
Yes, I lived at home. That was another factor. We couldn’t afford for me to go off and stay somewhere. I actually—we had a man in our church who worked in Easton, which is where
Lafayette is, and he would take me over there in the morning, and in the afternoon when I was finished, I would walk down Route 22 and hitchhike my way back to Bethlehem.

_Tacey Ann Rosolowski, PhD_
0:03:26.7
Wow. And you did that for four years?

_Gerald P. Bodey Sr., MD_
0:03:28.6
For four years.

_Tacey Ann Rosolowski, PhD_
0:03:29.4
That’s amazing. Now, I’m getting the sense that church was kind of important to you when you were growing up with your father being a minister.

_Gerald P. Bodey Sr., MD_
0:03:37.1
Still is.

_Tacey Ann Rosolowski, PhD_
0:03:38.1
Okay. Well, tell me how—did that have any kind of influence on your choice of profession?

_Gerald P. Bodey Sr., MD_
0:03:43.6
Absolutely. As a matter of fact, when I was young—very young—I felt that I ought to become a medical missionary.

_Tacey Ann Rosolowski, PhD_
0:03:52.3
Oh, and what does that mean exactly?
Well, it means you go off—you get your medical degree, and then you go off to some foreign country and work there not only doing medical work but also presenting the Christian Gospel to people. My uncle and aunt were actually very famous missionaries in Africa.

*Tacey Ann Rosolowski, PhD*

0:04:15.5

Oh, really? What were their names, or are their names?

*Gerald P. Bodey Sr., MD*

0:04:17.6

Becker—Mr. and Mrs. Carl Becker, and he was there for many, many, many years. I think he was in the Belgian Congo, if my memory serves me correctly. So I went to Lafayette College. Our physician had been at Johns Hopkins and worked under Howard Keller, who was one of the four founders of Johns Hopkins Medical School. His son was a friend of ours, as well. He recommended to me that I go to Johns Hopkins, which I did. Both he and his father did. Actually, I graduated from Lafayette College, and my wife had spent two years at—I think it was—at Jefferson in Philadelphia in a nursing program. She finished that requirement, and I finished my college education, so we got married. Two weeks later we were off to Johns Hopkins in Baltimore.

*Tacey Ann Rosolowski, PhD*

0:05:37.4

Now was this—when did you begin thinking about infectious diseases as a specialty?

*Gerald P. Bodey Sr., MD*

0:05:43.1

That came much later, really. Let’s see, after I finished medical school—graduated—then I spent a year as an intern and a resident at Johns Hopkins. Then they did not choose me to continue for my second year of residency, and that was at the time when they had a military draft for physicians.

*Tacey Ann Rosolowski, PhD*

0:06:09.9

Okay. And explain that just for the recorder so people who listen know—

*Gerald P. Bodey Sr., MD*

0:06:16.7

The government was in a position to call physicians, in some age span, to work for the government, and some of them ended up in the camps and things like that. I don’t know how
many of them actually went out of the country. My friend there, Charles Mengel, who I mentioned was the son of our doctor, had also gone to Hopkins. He suggested to me that it would be a good idea for me to apply for a position on the Leukemia Service at the National Cancer Institute. He said, “You’ll get to work under a Dr. [Emil J] Freireich, and you’ll learn a whole lot by being with him. Besides that, then you will fulfill your military requirement, because you’ll be in the US Public Health Service during that time.”

Tacey Ann Rosolowski, PhD
0:07:16.0
Now how did Charles know about this?

Gerald P. Bodey Sr., MD
0:07:19.0
I’m not sure how he knew, but he did it.

Tacey Ann Rosolowski, PhD
0:07:20.8
Oh, he did it himself? Okay.

Gerald P. Bodey Sr., MD
0:07:23.1
Yes, he did it himself. So I followed his advice and they accepted me, and we moved off to the Washington, DC, area. Actually, we were in the outside of the city. For some reason I’m balking the name of the little town we were in. Anyway, I spent my two-year requirement there, and I found it to be so useful that I spent another year there.
Then I decided that I had to complete my residency, but I didn’t know what I was going to do after that, except that I sort of had the idea that I would be a medical missionary. That didn’t quite work out.

Tacey Ann Rosolowski, PhD
0:08:12.9
Did you change your thinking, or was there something else going on?

Gerald P. Bodey Sr., MD
0:08:15.3
No, it was just that things didn’t quite work out as I had anticipated. It wasn’t that I lost interest. It was just that it didn’t work out. So I elected to go the University of Washington to finish my residency training and was accepted there.
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_Tacey Ann Rosolowski, PhD_

_0:08:44.2_

Why did you choose that particular program?

_Gerald P. Bodey Sr., MD_

_0:08:46.9_

Well, I was familiar with some of the work that had been done there in infectious disease; in particular, Dr. William Kirby was very famous.

_Tacey Ann Rosolowski, PhD_

_0:08:56.1_

At what point did you decide infectious diseases were the direction you wanted to go?

_Gerald P. Bodey Sr., MD_

_0:09:02.0_

Around that time, in 1960 I guess or thereabouts.

_Tacey Ann Rosolowski, PhD_

_0:09:08.6_

What was it that attracted you to that particular field?

_Gerald P. Bodey Sr., MD_

_0:09:11.5_

My experience at the National Cancer Institute in the Leukemia Service. All these patients with leukemia didn't have any normal host defenses against infection. They got not only the usual kinds of infections that people get but also other unusual infections, particularly fungal infections that normal people just don’t generally get.

_Tacey Ann Rosolowski, PhD_

_0:09:35.9_

Maybe now’s a good time for me to ask you—because I have a feeling that this infectious disease in cancer is not like somebody getting a really bad cold. Why are infections such a serious thing in cancer patients? And what can they do to the patient?

_Gerald P. Bodey Sr., MD_

_0:09:53.0_
In the first place, with some patients who have diseases like leukemia, their normal white blood cells don’t exist or they have abnormal ones, so they’re not able to fight an infection for that reason. Then on top of that, in order to treat them successfully you have to give medicines that not only will kill the leukemic cell but they also decrease the normal cells for a while. Then if a patient—if you are successful in treating the leukemia, then they’ll recover again. So during that time, they may have only 100 normal white blood cells and they’re at a very high risk of developing a very serious infection. If they have a serious infection, their likelihood of responding to antibiotics that were available at that time was pretty low.

_Tacey Ann Rosolowski, PhD_

_0:10:49.4_

Now what happens to the patient? I mean, is it a fever? What other kinds of things can happen to a patient who has these very serious infections?

_Gerald P. Bodey Sr., MD_

_0:10:56.8_

Well, they have low blood counts, so they can bleed. There are a whole host of things that can happen to them. And the mortality rate at that time for patients with leukemia was very high.

_Tacey Ann Rosolowski, PhD_

_0:11:11.1_

I think I read when I was doing the background that the infection was actually the biggest killer of people with leukemia.

_Gerald P. Bodey Sr., MD_

_0:11:18.6_

Yeah, I was just going to say that the major cause of death in patients with acute leukemia was infection, and secondly would have been hemorrhage. So unless they went into remission, they obviously didn’t survive. When I went to the National Cancer Institute and worked on the Leukemia Service, I began to get interested in this problem of infection. At that time, there were very few antibiotics available, but we did a study. Dr. Freireich was very involved in giving some guidance on that. We looked at the relationship between the normal white blood cell count and infection in leukemic patients. That was one of the first papers I wrote. Actually, something unique happened to me when I was at Johns Hopkins. While a fourth year student I wrote a clinical paper on disease in the chest, which was an unusual disease called medical _mediastinal emphysema_, and I was allowed to publish that in the _Annals of Internal Medicine_, which was a
major journal. I was the only author. I expected that one of my professors was going to loan his name for this, and the chairman of the Department of Medicine told me I could go ahead and publish it on my own.

Tacey Ann Rosolowski, PhD
0:12:48.3
Now, why do you think he said that? That seems like it’s pretty unusual and generous.

Gerald P. Bodey Sr., MD
0:12:51.9
I thought it was pretty unusual, too. I can’t explain it. I don’t think it was because he thought it was worthless, because he had to sign some papers saying that he agreed that I was going to do this. Then I had—another thing that was important in my life in medical school was that I worked for Dr. George Gey. I don’t know if you’ve heard of him.

Tacey Ann Rosolowski, PhD
0:13:16.1
No, I haven’t.

Gerald P. Bodey Sr., MD
0:13:16.7
That book about the black woman who had endometrial cancer and they took her cancer out—he was the one. And I thought the book was unfair to him. He developed the means whereby you could make tissue—what’s the word?—grow the tissue in test tubes, and he had published extensively on that. There are some implications—at least what I interpreted as implications—that he was making a lot of money. But that wasn’t true. He was a professor there at Hopkins, and I worked with him for three and a half years. I did some of my own research; it wasn’t very important, but I did it. He allowed me to publish that as a senior author.

Tacey Ann Rosolowski, PhD
0:14:22.7
Now, what did you learn from Dr. Gey? Was he a mentor of yours, really?

Gerald P. Bodey Sr., MD
0:14:27.9
Sort of. He was very kind and he helped me get some scholarship funding and things like that. I had a salary when I worked with him. I learned a good bit about growing human cells in test
tubes and that sort of thing, just general principles about how to go about doing research. So, now where are we?

_Tacey Ann Rosolowski, PhD_
0:14:52.8
We were—

_Gerald P. Bodey Sr., MD_
0:14:55.2
We got waylaid there somewhere.

_Tacey Ann Rosolowski, PhD_
0:14:56.3
That’s okay. I mean, that’s the nature of a conversation, right?—digression.
Chapter 02
A: Joining MD Anderson/Coming to Texas
*Recruited by J Freireich and Moving the Family to Texas*

**Story Codes**
B: Personal Background
A: The Researcher
A: Professional Path
C: Discovery, Creativity and Innovation
C: The Professional at Work
C: Patients, Treatment, Survivors
C: Research, Care, and Education
A: Character, Values, Beliefs
A: Joining MD Anderson

**Gerald P. Bodey Sr., MD**
0:15:00.5

We’re at Seattle. I was there for one year. During this time, I guess, was around when it became clear that I was not going to end up being a medical missionary. That just didn’t quite work out. So I didn’t know exactly what I was going to do, and I was thinking, “Well, maybe I will go into private practice somewhere here in Washington or something.” I really was very insecure at that time, not knowing what—

**Tacey Ann Rosolowski, PhD**
0:15:32.2

—what to do. Now, what kind of work were you doing when you were in Seattle?

**Gerald P. Bodey Sr., MD**
0:15:36.1

I was just a resident.

**Tacey Ann Rosolowski, PhD**
0:15:37.1

Oh, okay. So you weren’t doing any research or—?
0:15:38.9
I was finishing up my residency at that time. It just so happened that around the end of November or thereabouts, I got contacted by Dr. Freireich. He had come down here from the National Cancer Institute to MD Anderson—he and his boss, Dr. Emil Frei. So they were down here now, and they were looking to recruit some people, and they wanted me to come down and see if they could get me to go down there. Well, I will never forget I came down here, and it was about two weeks before Christmas, and it was rather hot and humid and unpleasant. I stayed in a motel near MD Anderson. Dr. Freireich took me out to his home for dinner. We came up past Bellaire Boulevard and—I forget what the other street was; it doesn’t matter. Anyway, there was a little plot in the middle of the street there, and they had a little hut there. It’s still there as far as I know. It was made out of bricks. They had this whole thing decorated up for Christmas. The street light changed to red, and we’re sitting there, and they have this music coming out—“It’s Beginning to Look a Lot Like Christmas.” I looked around, and I thought, “I don’t know that anything looks like Christmas here.” So the next—there was another doctor with me, Dr. [Evan] Hersh, who had been at NCI with me. He had been recruited there too. When I went home, I went by way of where he was living. He was in California, at Stanford. And we sat there on a Saturday night until the wee hours of the morning commiserating, because we knew this was a great medical opportunity—the job—but we didn’t want to come and live in Texas. I flew on home to Seattle and walked around in the snow, which just made it even more difficult. But we both decided to come here, and I’m certainly very, very glad that I did.

*Tacey Ann Rosolowski, PhD*
0:18:08.7
Was the adjustment to Texas hard after you got here?

*Gerald P. Bodey Sr., MD*
0:18:14.0
Not terribly so.

*Tacey Ann Rosolowski, PhD*
0:18:17.8
So you kind of built it up in your mind?

*Gerald P. Bodey Sr., MD*
0:18:19.8
I was busy enough with my work. I don’t know. You need to ask my wife how she adjusted; that’s more important. But no, we knew what we were getting into. So it wasn’t—well, the one thing that I should say is that when we came down here during August of the next year, I asked for permission to stay up there for a month or two to work in a microbiology laboratory so I’d be better prepared for what I was going to be doing down here. We drove from Seattle to Houston in August. At that time, we had two children, and my wife was pregnant with our youngest, and we didn’t have any air conditioning in our car. I will never forget, particularly as we drove across north Texas, all these big limousines coming with their windows up and all that, and here we were—it didn’t matter whether our window was up or down, we were roasting either way. We got into Houston on a Friday afternoon around 3:00, went in and saw Dr. Freireich. They had a place for us to stay close by the hospital. The next morning at 11:00, I took our car, and we drove down to what was then Mosehart and Keller, down on Old Spanish Trail. We went in there and bought a new car with air conditioning. Now, I did not have an address. I didn’t have a bank account. I really didn’t have any money either. And I came out with a new car.

_Tacey Ann Rosolowski, PhD_

0:20:06.0

Wow, things are different now.

_Gerald P. Bodey Sr., MD_

0:20:09.3

They sure are. They sure are. So anyway, that’s—we ended up moving to Meyerland. That’s where we lived then up until we came up here in 1991.
Tacey Ann Rosolowski, PhD

0:20:22.6

Well, tell me about your impressions of Developmental Therapeutics when you arrived. What was the environment like for work, for research?

Gerald P. Bodey Sr., MD

0:20:32.6

Well, it was a unique—it wasn’t really unique in the sense that I’d had the same experience when I was at the National Cancer Institute. But it was unique in the sense that in my other areas, where I took care of patients—we took care of patients; we didn’t do some research at the same time. But they had research projects on leukemic agents and so on. Having worked on infectious complications when I was at the Cancer Institute, I of course was interested in doing that here, and Dr. Freireich was also interested in having me do that. So my research was related to diagnosing and treating infections primarily in leukemia patients. The solid tumor patients didn’t
get the real low blood counts and all, so we had some work. Around that time, the pharmaceutical industry began to be producing some new antibiotics, and we were able to get them. I think carbenicillin was the first antibiotic that I worked with experimentally, and that was provided by Beecham Laboratories in England. I don’t know how I managed to convince them to make the drug available to me, but I was successful, and they used to ship all the drugs from England. It was not being made here. I would get these big drums, about that high—

_Tacey Ann Rosolowski, PhD_
0:22:21.4
Wow, so like three feet high.

_Gerald P. Bodey Sr., MD_
0:22:23.5
And they were shipped in one gram vials of carbenicillin. Now, the dose was five grams every four hours—thirty grams a day. So that’s thirty of these little vials for one patient per day. We got to the point that we were using so much of it that we had a nurse on one of the wards spending almost the entire day just mixing up the carbenicillin.

_Tacey Ann Rosolowski, PhD_
0:22:49.2
Now, how many patients did you have on one of your trials that required—? You must have required an awful lot of drugs.

_Gerald P. Bodey Sr., MD_
0:22:57.2
Well, we had—I would have to look up a paper to tell you how many, but it was a substantial number. Because at the time that I started, the antibiotics that were available were either not very effective in patients who didn’t have any neutrophils or they had a limited spectrum. _Pseudomonas_ was one of the most important infections that we were dealing with, and it was almost uniformly fatal.

_Tacey Ann Rosolowski, PhD_
0:23:27.4
Now, what exactly is _Pseudomonas_?

_Gerald P. Bodey Sr., MD_
0:23:29.3
It’s a gram-negative bacteria and very aggressive. The mortality rate at that time must have been around 70% or 80%, and it fell to about 20% to 25% with carbenicillin. I don’t know if you have my paper on carbenicillin, but—it should be in the archives over there, or I can get it. I think I may have a copy of it. I have my whole bibliography over there. I did keep a copy of a couple of papers. I think that was probably one of them, because that was one of my first major—well, it was the first major paper written on an investigational antibiotic. It had a dramatic impact. I mean, the mortality rates went from about 80% to 20%, something like that. It was really very dramatic.

*Tacey Ann Rosolowski, PhD*

0:24:36.0

So that automatically became integrated into care for these patients?

*Gerald P. Bodey Sr., MD*

0:24:41.0

Yes.

*Tacey Ann Rosolowski, PhD*

0:24:41.7

So that was work that you did in those first years in Developmental Therapeutics. Now, what other kinds of research projects were you working on?

*Gerald P. Bodey Sr., MD*

0:24:49.9

I did do—I took care of patients. I don’t know how many months of the year I was a physician in the ward, but it was a fairly substantial number.

*Tacey Ann Rosolowski, PhD*

0:25:05.1

Did you find that you were seeing a much broader variety of patients?

*Gerald P. Bodey Sr., MD*

0:25:11.7

When I started out, it was just patients with acute leukemia. Later on I got involved in experimental chemotherapy. I then got involved in the care of patients with other kinds of malignancies as well. Throughout my career, my major area of interest in cancer chemotherapy was in acute leukemia. I worked very closely with Dr. Freireich. He deserves the credit for all the discoveries, but I did a lot of the work with him over the years.
I was curious, because you mentioned you worked on chemotherapy, what’s the relationship between the work you did on infectious diseases and the work you did on chemotherapy?

There wasn’t any real relationship between them, other than that the patients were getting both things. But as time went on, I got more and more involved in the cancer chemotherapy. As a matter of fact, I had to get involved right from the beginning, the first time I started taking care of patients on the ward. I mean, they were getting—

Because they were getting both the chemo and they had to be treated for infectious diseases?

Yes. So I got interested in that. Then as time went on, that became as much of an interest to me as infectious complications. And I did a lot of—I worked with Dr. Freireich on a lot of things. Then actually, at one point in time, I was the head of the Investigational Chemotherapy Program for a while, and that involved all—whatever drugs we had. And we were heavily involved with the National Cancer Institute and their investigational drug program. That’s where we got many of our new anti-tumor agents, although some of them we got directly from the pharmaceutical industry. The antibiotics—they all came from the pharmaceutical industry.

I was involved in a variety of drugs. At the time I first started out, Beecham Laboratories in England was very heavily involved with the development of new penicillin derivatives, like carbenicillin, and then there were a bunch of others. Pfizer Laboratories became heavily involved, and I had close working relationships with both of those companies, then Schoenig and a few others as well. Nowadays you’re sort of a criminal if you work with drug companies. In those days, we had a very good relationship. Nobody ever tried to get me to cheat on anything or do anything inappropriate. They were helpful in supplying the drugs and that sort of thing. I mean, I like to think of myself as being a moral person, so I would not have been involved—matter of fact, there were a couple of occasions where I wouldn’t have anything to do with something because I thought it wasn’t right or not moral.
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Tacey Ann Rosolowski, PhD  
0:28:32.2  
Can you tell me in a kind of sketch—?

Gerald P. Bodey, Sr., MD  
0:28:34.7  
Nothing specifically, I don’t have a very good memory of it all. I do remember that there were very few instances where I did not get involved. Occasionally there would be a drug that I would give talks—that’s also considered taboo today. But I gave a talk, not on an antibiotic; I gave a talk on infections in cancer patients. And then of course, I would discuss any new antibiotics and our experience with them. But I never felt—well, in all the years that I was involved with the drug companies, there were only maybe two or three occasions where some rep tried to get me to say something that I considered inappropriate and I wouldn’t do it. But by and large, I felt that the relationships that I had with the pharmaceutical industry were totally ethical. If they have a new drug, they’ve got to have some patients to study with it or where is it going to go? So I must have studied—I don’t know—fifteen or more new agents over the years.

Tacey Ann Rosolowski, PhD  
0:29:49.7  
Why do you think the situation has changed now and the relationship with drug companies is so ethically charged?

Gerald P. Bodey Sr., MD  
0:29:58.3  
Because there were some people who took advantage of things, both from the standpoint of the pharmaceutical company and from some of the doctors. They got a nice pile of money, and some of them were not totally ethical. Among the managing people in the pharmaceutical industry, I’ve never had anybody who tried to get me to do something that was unethical. I got paid for giving a talk. It wasn’t anything as high as what they’re getting nowadays. But that didn’t influence me. Certainly there was one factor, and that is that it was only the companies that had new drugs that were going to have me give a talk. I didn’t think that was something unethical. I was telling the truth. And the whole climate at that time is not what it is today, in terms of these issues.

Tacey Ann Rosolowski, PhD  
0:31:08.3  
Well, it’s staggering too, the amount of money to be made nowadays with these drugs. It’s a whole other world.
Gerald P. Bodey Sr., MD
0:31:13.9
Yeah, I got paid adequately. It was not anything like they’re paying people now. I found out that there were some people who were getting about five times as much as I was, but that didn’t bother me. I was satisfied with what I was provided.

Tacey Ann Rosolowski, PhD
0:31:31.4
Could you tell me a little more about the different—the most important of the research projects that you worked on when you were in Developmental Therapeutics, on the antibiotics?

Gerald P. Bodey Sr., MD
0:31:42.4
The antibiotics—oh boy, I’ll have to think a little bit.

Tacey Ann Rosolowski, PhD
0:31:47.0
Well I could—

Gerald P. Bodey Sr., MD
0:31:49.5
I don’t have—

Tacey Ann Rosolowski, PhD
0:32:03.3
Let’s see. I know you did some work—I have a list of certain things. There’s one—you were saying that you did some comparative studies and then studying antibiotic combinations. What were the antibiotic combinations about? Why did you want to move to those?

Gerald P. Bodey Sr., MD
0:32:15.0
Because the studies could extend the spectrum of activity, and in some instances the drugs interacted so that you got more of an effect than you would with either one of them alone. That was a major factor, too. It was both the spectrum of activity and the increased activity of the
combination other than singularly. Then there was another factor, too, and that is if you used only one antibiotic, it was possible for the organism to develop resistance to that antibiotic, whereas if you had two, that became very, very unlikely.

_Tacey Ann Rosolowski, PhD_

0:33:03.8
I was actually—I shouldn’t have been surprised, given all the advice nowadays for people to avoid taking antibiotics that are unnecessary, because of the problem of creating resistance. But I was surprised to read about the importance of resistance, and also that the resistance could be specific to an institution, which I thought was quite fascinating. Could you talk a little bit about that?

_Gerald P. Bodey Sr., MD_

0:33:31.1
If it was at an institution, it is more than likely that they were using certain drugs routinely and basically all the time. In that kind of a setting, then there is potential for organisms either to develop resistance or organisms that were inherently resistant to spread. That’s one of the things that we have to be concerned about. When I started out, that wasn’t as big a problem as it became over time, because exposure to antibiotics—exposure to an organism by antibiotics that the organism was resistant to would only modestly act as susceptible for encouraging the establishment of resistant organisms in the patient. Then that patient could then be spreading it to other people.

_Tacey Ann Rosolowski, PhD_

0:34:31.2
Now, how did you respond at a clinical level to that information? Did you set up a system where MD Anderson would routinely test to see if the organisms were resistant? How did that work so you understood what was going on in the institution?

_Gerald P. Bodey Sr., MD_

0:34:48.7
If a patient developed fever, the first thing we did was collect specimens and see what was growing in them. Then, of course, if something grew, we would be testing, also, its antibiotic susceptibility pattern. That’s how you would get your information. Then, of course, if the patient was doing well and then all of a sudden started to have a fever again, well, then we’d be collecting specimens and looking for some other organism. One of the problems that we had to
deal with was that we would start out with a patient who had a bacterial infection, and then they would get a fungal infection as a superinfection because the antibiotics didn’t have any effect on fungi. And candidiasis was the biggest culprit. I guess it still is. I wrote a couple of papers on candidiasis over the years.

*Tacey Ann Rosolowski, PhD*
0:35:48.9
And I was reading hepatosplenic candidiasis—?

*Gerald P. Bodey Sr., MD*
0:35:53.8
Hepatosplenic candidiasis—that was one of the first papers I wrote on fungal infections and one of the first—if my memory serves me correctly—one of the first papers I wrote when I came here.

*Tacey Ann Rosolowski, PhD*
0:36:07.3
What exactly is it?

*Gerald P. Bodey Sr., MD*
0:36:09.2
*Candida* is a fungus. Normal people get skin infections and all that. In these people without white cells and all, the organism becomes invasive and causes pneumonia, meningitis, and all sorts of things. If my memory serves me correctly, and I think it does, when I first arrived here from Seattle, they took me on rounds with the Leukemia Service. They had this patient who was running fevers, and he was obviously sick. I think he had a pretty good white count, but he just wasn’t doing well, and they didn’t know what was going on with him. I don’t know—I read the paper again recently—and I don’t know how it was that I was attuned to this, but I said, “Well, I think this man has *Candida*, probably in his liver and his spleen.” And that’s what it turned out to be. He ended up being treated successfully.

*Tacey Ann Rosolowski, PhD*
0:37:17.4
What do you treat it with?

*Gerald P. Bodey Sr., MD*
0:37:18.5
I think he had actually gone into remission of his leukemia, and he just was still running this fever. So we gave him amphotericin, which was an antifungal drug. He recovered and lived for quite a while after that. I’m not sure that I have a copy, but it’s in the archives over there.

_Tacey Ann Rosolowski, PhD_

0:37:45.8

I also read that you were involved with creating an animal model for _Candida_, that there wasn’t one before.

_Gerald P. Bodey Sr., MD_

0:37:57.5

I think we’re going to have to skip over that. I don’t remember, and I don’t know that we were successful.

_Tacey Ann Rosolowski, PhD_

0:38:04.2

Okay. We were talking briefly about the antibiotic combinations, and I had two. I’m not sure I’ll be able to pronounce it right, so you can correct me—cefoxoprazone, aztreonam.

_Gerald P. Bodey Sr., MD_

0:38:31.1

Aztreonam—I don’t know if there was anything particularly magical about that. It just happened that when a new drug becomes available you want to study it. Aztreonam is a penicillin derivative. Cefoperazone is a cephalosporin. Cephalosporines and penicillins have a lot in common in terms of their activity and susceptibility and their lack of significant serious toxicities. They’re called beta-lactam antibiotics because of their basic structures and beta-lactam chemical structures. I think that was probably one of the first, if not the first, study looking at two beta-lactams in combination.

_Tacey Ann Rosolowski, PhD_

0:39:28.1

What was significant about that?

_Gerald P. Bodey Sr., MD_

0:39:30.0
Because usually you used some other chemical structure in your second antibiotic. You would use a beta-lactam and maybe an aminoglycoside, which was a totally different chemical structure. But to use two beta-lactams together was a bit unusual.

*Tacey Ann Rosolowski
0:39:46.4
Why did you choose to pair them?

*Gerald P. Bodey Sr., MD
0:39:50.2
Because it was available. Cefoperazone was a broad-spectrum cephalosporin, and we’d had good results with it. How I decided to come up with cefoperazone plus aztreonam, I’m not quite sure anymore, other than it being a rather unique combination at that time to use those two beta-lactams in combination.

*Tacey Ann Rosolowski, PhD
0:40:22.9
Do you recall what the results were?

*Gerald P. Bodey Sr., MD
0:40:25.2
I’d have to look it up in my bibliography. I think it turned out quite well, but that’s a long time ago. Nobody’s using that anymore.

*Tacey Ann Rosolowski, PhD
0:40:36.9
I bet. Also, I have down fluconazole versus a placebo.

*Gerald P. Bodey Sr., MD
0:40:50.5
Fluconazole versus a placebo.

*Tacey Ann Rosolowski, PhD
0:40:55.0
How does your memory serve? It’s probably much more accurate.
0:40:59.3
Well, no, it may well be that it was a prophylactic study rather than a therapeutic study. Fluconazole was an oral or intravenous antifungal preparation against Candida, not so much some of the other fungi like Aspergillus, but against Candida. The nice thing about it was that it had very little toxicity, whereas drugs like amphotericin and the other antifungal drugs were all fairly toxic drugs.

Tacey Ann Rosolowski, PhD
0:41:36.0
I guess that leads to another issue, which were the studies of therapeutic drugs for once the patient had these infections versus the prophylactic use of them. And what did you find? How did you approach studying how prophylactic drugs should be administered? What were some of the criteria?

Gerald P. Bodey Sr., MD
0:41:59.2
We certainly wouldn’t be going around to the average cancer patient. We would use the patients who were at high risk of developing infection when they were undergoing their treatment. Of course, one of the problems that we face with diseases like acute leukemia and the patients that didn’t have any neutrophils—that they would get an infection. They would die of the infection before they had a chance for the chemotherapy to have maximum effect. We began to look at regimens where we could try to prevent them from getting the infection. The major focus here was on fungal infections, Candida in particular. That’s the most frequent fungal infection; at least it was at that time. The fluconazole could be taken by mouth and that had very little toxicity, so it was an ideal agent for prophylaxis. The only problem with it was if you used the prophylaxis, then you don’t have anything comparable to use for therapy, so you would have to go to amphotericin or something like that.

Tacey Ann Rosolowski, PhD
0:43:08.8
And the problem with amphotericin—was there more toxicity?

Gerald P. Bodey Sr., MD
0:43:12.2
That’s got a lot of toxicity.

Tacey Ann Rosolowski, PhD
0:43:13.2
Oh, really. What would the effects be? What were the toxic effects?

_Gerald P. Bodey Sr., MD_
0:43:17.6
One of the concerns would be damaging the kidneys. That was probably the biggest side effect, but there were others as well. It wasn’t terribly well tolerated by patients either. It was an effective drug, and it’s still being used, but it’s a drug that has toxicities. Obviously, you’re looking for a drug that’s effective and doesn’t have toxicities. The fluconazole met that.
Chapter 4

A: The Researcher

Building MD Anderson’s Laminar Airflow Hospital Units

Story Codes
A: Overview
A: Definitions, Explanations, Translations
A: The Researcher
A: The Clinician
B: Industry Partnerships
C: Patients
C: Patients, Treatment, Survivors
C: Cancer and Disease

Tacey Ann Rosolowski, PhD
0:43:53.2
I’d like to talk about something related to this work on infections, which was your development of the Protected Environment Program, particularly the laminar airflow system, which was put in place in ’77.

Gerald P. Bodey Sr., MD
0:44:13.1
The year that I was leaving the National Cancer Institute, there was a man by the name of Matthews—T.M. Matthews—who developed the protective environment, which was a bed with a plastic tent around it. [See image next page.] Then you had some chambers on the bottom where you could put things in and take things out and sleeves on the side. And you had a filtered air system so this would expand, and it had a bed in there. The patient could get up off the side of the bed, but he wasn’t going to be able to go anywhere. So it was protective enough. They were protected against the environment and the air and everything else, but it limited the patient’s ability to do anything.

Tacey Ann Rosolowski, PhD
0:45:11.8
Now what was the range of things that the protected environment was designed to keep out? It may seem obvious, but—
Interview Session: 01
Interview Date: June 19, 2013

Matthews Protected Environment [and Image reference code]

Laminar Air Flow Unit
**Gerald P. Bodey Sr., MD**  
0:45:18.4  
Anything—any organism that is floating around in the air or that could be carried in by the doctor or nurse examining the patient. Anything. Even the food was specially prepared.

**Tacey Ann Rosolowski, PhD**  
0:45:32.8  
So you were primarily concerned with organisms, not with dust or particles or anything like that?

**Gerald P. Bodey Sr., MD**  
0:45:39.3  
There had been filtered air before but the patient could be contaminated from some other source. The objective was to make it as germ-free an environment as possible. This was the first type of unit. It was called a Life Island. They just got those in around the time I was leaving the National Cancer Institute to go to Seattle. When I came down here, they had—I think they already had some or they were getting some. I became responsible for them. We had two of these Life Island units. It was difficult for the patients. Suddenly they couldn’t go anywhere. There was plastic so they could see what was going on. Anything they needed, or if they wanted to go to the bathroom or something, they had to have somebody come to help them. It was very inconvenient, but it did reduce the risk of infection.  

We had one patient—a remarkable man—he was American and his wife was British. They had two children. He stayed in a Life Island. He didn’t want to come out until he went into remission. I can’t tell you any longer how long it was, but I think it was close to a year that he stayed in. Then finally his bone marrow looked somewhat better, and I said, “We better take him out of here now,” because otherwise he may never get out of here. Unfortunately, we got him out and he only lasted about a couple—no more than a week or so. He got a fungal infection or something, which he may have actually had before he came out. At any rate, he didn’t last very long. What I will never forget is his wife and his two little boys came into the room. Then they unzipped the side of the tent, so he could come out, and these kids were just clutching him, there to touch their father. I just felt really so badly, because he had stayed in there for such a long time, then he comes out and in a matter of a week I’m pretty sure he had developed histoplasmosis as his cause of death. He only lasted something like less than a week outside.

**Tacey Ann Rosolowski, PhD**  
0:48:09.8
So he was still extremely fragile because of the suppressed immune system?

Gerald P. Bodey Sr., MD
0:48:14.2
It was not the most ideal situation, but it was as close as he was coming to getting in remission He did have some good white cells and all that, and we just felt like, “We can’t keep this poor man in until he dies. His family needs to have some chance to be with him. He does have enough white cells. He should be able to do all right, and hopefully he’ll continue to do better.”
Unfortunately, he had this existing infection that hadn’t manifested itself, and it was not very long until he died. Then somebody at the National Cancer Center—I went down there for a meeting—asked me if I would be interested in laminar air filters. Then they described what they were and so on. I said, “Yes, we certainly would.” We had to convince Dr. [R. Lee] Clark and his associates that it was worth tying up two rooms of the hospital to put these units in. But we were able to install two laminar air filter units with a corridor in between.

Tacey Ann Rosolowski, PhD
0:49:28.1
Can you describe what the air flow is in the laminar airflow? And why is it important?

Gerald P. Bodey Sr., MD
0:49:34.5
Instead of just coming in and down, it comes in laminar distribution. So one whole wall of the room was filled with these screens, which have little holes in them, and the air came through there in a laminar pattern across the room. Of course, by the time it got down to the end it wasn’t so laminar anymore.

Tacey Ann Rosolowski, PhD
0:50:00.8
Why was it designed that way?

Gerald P. Bodey Sr., MD
0:50:02.7
It would prevent the causation of the air somewhere in a corner getting some kind of infection in it or something like that, so it kept the air pure as it came through the room.

Tacey Ann Rosolowski, PhD
0:50:22.7
So it kept it circulating in a really systematic way?
Gerald P. Bodey Sr., MD  
0:50:25.3  
Yes. It recirculated it. It returned through a vent in the ceiling, and so it was just constantly filtered. It was possible to adjust the number of air exchanges per hour. Now, of course, there were other things we had to do, too. We had to design a water supply system that was filtered. And that wasn’t very picturesque, but it did work.

Tacey Ann Rosolowski, PhD  
0:50:55.0  
Why do you say it wasn’t picturesque?

Gerald P. Bodey Sr., MD  
0:50:56.7  
We had this great big container unit that held the water supply. Then, the water would come out from the water supply system and go through this filtering system. So the water was filtered. Then it would come out and go into this drain. Now, the drain was stainless steel, and we took it out at regular intervals and cleaned it. It was quite an operation. But the patient then was able—if he was able—to get up out of bed, he could go and brush his teeth and that sort of thing over this stainless steel sink. And we had this sterile water going through this filtering system.

I’ll tell you one thing funny. The water system, of course, came through a pipe from the hospital system. We would change the filtering system once a week to sterilize it. One day it was due to be changed, and I was busy, so I asked one of my associates to go down and to change the sterilizing system. So he goes down there, and he disconnects the sterilizing system but forgets to turn off the water. So water’s shooting out, and he didn’t know how to turn it off. It ended up actually going through the floor into the room underneath. He never forgave me for that.

Tacey Ann Rosolowski, PhD  
0:52:36.4  
He didn’t forgive you?

Gerald P. Bodey Sr., MD  
0:52:41.2  
I’ll tell you, there he was when I came down—they called me. He’s standing there trying to hold this water in and getting soaking wet and the water is all over the place. What a mess.
Interview Session: 01
Interview Date: June 19, 2013

Tacey Ann Rosolowski, PhD
0:52:55.8
I’m curious, with the design with the flow of air through the space the way it was, did you plan tasks in specific places within?

Gerald P. Bodey Sr., MD
0:53:08.1
Plan what?

Tacey Ann Rosolowski, PhD
0:53:08.7
Well, I’m wondering like if somebody had to come in to do something, did you have them do it close to the origin of the air source and sweep it away?

Gerald P. Bodey Sr., MD
0:53:17.5
The way the system was designed—and you can get a copy, I’m sure, from the archives of one of the papers that has a picture. Here’s the wall, which is the flow of the air filtration system. So it’s a wall with holes in it, and the air is coming out. Then the bed is right up against the wall there.

Tacey Ann Rosolowski, PhD
0:53:38.0
Now, why did you place the bed there next to the holes where the air came out?

Gerald P. Bodey Sr., MD
0:53:43.0
There was space so it didn’t block the air, but it was close enough so that the air wouldn’t get contaminated in any way. Now, all the bedding and all that was sterilized. There was a space at the door into the room so that we could come in and stand down on a space without having to go through a lot of rigmarole and put a mask on.

Tacey Ann Rosolowski, PhD
0:54:13.8
Basically, you were standing downwind?

Gerald P. Bodey Sr., MD
0:54:16.5
Right, exactly.
Tacey Ann Rosolowski, PhD
0:54:17.2
So the air was passing over you and your air wasn’t brushing onto the patient. I see.

Gerald P. Bodey Sr., MD
0:54:24.1
Yeah, and then the sink and all that stuff was down in that area, which we stayed away from.

Tacey Ann Rosolowski, PhD
0:54:30.7
So basically, the patient was always getting fresh filtered air passing over them?

Gerald P. Bodey Sr., MD
0:54:34.5
That’s right, yes. Now, along this one wall were closets, shelves, and all that. They could open them from either side, so they could take sterile items and put them there carefully without contaminating them, and the patient or a nurse who was in a sterile gown and all that, from the other side, could come and get them and take them to the patient. And then the patient had a little stand there by his bed and a light and all that. It was about as good as you could get and have that kind of a restricted environment. So we had two of those rooms initially, with this corridor in between where we stored things. Then they decided they were going to build the new Lutheran Pavilion at MD Anderson.

Tacey Ann Rosolowski, PhD
0:55:30.5
Well, I guess, before you say that—you said you had to convince R. Lee Clark to fund it?

Gerald P. Bodey Sr., MD
0:55:36.6
I did, because we ended up taking up three beds for two, so he wasn’t entirely enthusiastic about this. They had several meetings, which I attended, to discuss whether they were going to go ahead and do this or not. And finally, Dr. Clark said, “Okay, well, we’re going to go ahead and do it.”

Tacey Ann Rosolowski, PhD
0:56:05.6
What convinced him?

Gerald P. Bodey Sr., MD
0:56:06.5
I don’t know. I’d like to say I did. I’m not sure, but he finally did agree to do it.

Tacey Ann Rosolowski, PhD
0:56:15.3
Now what were the arguments that you used at the time?

Gerald P. Bodey Sr., MD
0:56:18.0
Oh, I don’t remember. Well, I mean the discussion was all on the potential benefits to the patients and that sort of thing. But we did recognize, of course, that they were losing one bed of income from having that there. There was a lot of conflict and several discussions. But then Dr. Clark finally decided to do it. He said, “Okay, gentleman, that’s it. We’re gonna do it.” I was getting kind of discouraged because I thought the direction seemed to be going the other way. So we had those two units. When the Lutheran Pavilion was put up, they decided that the top floor would be a laminar air filtered floor, the whole thing. There were twenty beds in there, two sides. It had a kitchen in there and everything. Now, there was—the way it was designed, there was a corridor on the outside, so that the patient’s relatives could come in and they could talk to the patient and all that, yet they had a barrier between them and the patient.

Tacey Ann Rosolowski, PhD
0:57:28.9
So there was like a core in the center with all of the laminar air filter rooms?

Gerald P. Bodey Sr., MD
0:57:32.5
No, the core was for the personnel who were working.

Tacey Ann Rosolowski, PhD
0:57:35.6
Oh, okay, and then a ring around them?

Gerald P. Bodey Sr., MD
0:57:36.9
Well then there were the rooms that went around it. Then there was a—
Gerald P. Bodey Sr., MD  
0:00:00.1  
—then there was a corridor on the outside.

Tacey Ann Rosolowski, PhD  
0:00:01.1  
Interesting.

Gerald P. Bodey Sr., MD  
0:00:02.5  
So there was a special elevator that came up for the relatives to come up and then go right up to the outside of it.

Tacey Ann Rosolowski, PhD  
0:00:09.7  
Now, let me ask you, on what basis was the go ahead given to put those twenty units in the top floor of the Lutheran Pavilion. I mean, did you, in the meantime, demonstrate that—?

Gerald P. Bodey Sr., MD  
0:00:22.4  
We had some fairly positive results. I would think that the National Cancer Institute was interested as well. We did get grants from them. I’m not sure what else might have played a role in it. I know it was expensive to operate, and the hospital wasn’t making money on it.

Tacey Ann Rosolowski, PhD  
0:00:51.3  
Right. Well, I’m just curious, if R. Lee Clark was so reluctant with these two original units, there must have been something convincing to say, “Yeah, let’s have the whole top floor of the Lutheran Pavilion be devoted to this.”

Gerald P. Bodey Sr., MD  
0:01:05.6  
I can’t answer that. I don’t recall. I know there was a lot of discussion. There wasn’t so much discussion then as before, part of the reason being the NCI was going to be putting a lot of
money into this development. In addition to that, we worked with Envisco, which was an air conditioning company in Albuquerque, New Mexico.

But I used to go out to Envisco, and the chairman of their company was very interested our project, and some of the other people that worked for them. Their company had worked with the federal government in providing the facility for developing the atom bomb. If my memory serves me correctly, the scientist who was the head of the development of the atom bomb was out there. I think that they had a laminar flow facility there where they were building the atom bomb, if my memory serves me correctly.

_Tacey Ann Rosolowski, PhD_

0:02:28.0

So the air conditioning company was actually involved in creating the filtration system for the air? That’s what they contributed to the project?

_Gerald P. Bodey Sr., MD_

0:02:35.9

Yeah, they worked with us. I would go out there on a regular basis. They were greatly involved in the design of our unit.

One of the things that I will never forget is that when I went out there, in those days the only airline was the Texas Treetops—the Trans-Texas. They always stopped at Midland-Odessa out in west Texas—where George Bush grew up. Anyway, they always stopped there, then from there on to Albuquerque. I can always remember as we flew over to come into the airport there, you look out across the land below us and see many properties divided into squares. There was a little driveway around each of them, but no homes. I don’t know what they were growing there. I looked down, and I thought, “Why on Earth am I living in Texas?” I just felt so sorry for those people that had to live down there. George Bush grew up there.

Well, I went out there, not often, maybe two or three times a year. I’d come in and share some ideas about how we could improve something and that sort of thing.

_Tacey Ann Rosolowski, PhD_

0:04:28.2

How long did it take to plan that?

_Gerald P. Bodey Sr., MD_

0:04:31.6
It didn’t take terribly long to develop a plan. It took a while to get it built because it was the last thing that was built in the Lutheran Pavilion. That was the twelfth floor.

*Tacey Ann Rosolowski, PhD*
0:04:45.4
Now that was the—as I understand it—the first time that laminar airflow units were actually planned into a building—

*Gerald P. Bodey Sr., MD*
0:04:53.5
That’s right. Yes, it was.

*Tacey Ann Rosolowski, PhD*
0:04:54.4
—and built into a building.

*Gerald P. Bodey Sr., MD*
0:04:55.2
That’s correct. Yes, it was. It was really a major step forward. I felt badly when they decided to shut it down, but they had been threatening to do it for some time because it was very expensive, and the benefits were not exceedingly dramatic. The incidence of infections in those patients was greatly reduced, but they were not completely eliminated.

*Tacey Ann Rosolowski, PhD*
0:05:28.0
Did that surprise you?

*Gerald P. Bodey Sr., MD*
0:05:29.7
What?

*Tacey Ann Rosolowski, PhD*
0:05:30.4
That you didn’t get more striking results?

*Gerald P. Bodey Sr., MD*
0:05:34.5
No, because people carry organisms in their gastrointestinal tract, and you do the best you can with the antibiotic regimens you use and so on, but it’s not perfect.

*Tacey Ann Rosolowski, PhD*

0:05:48.8
How long were the laminar airflow units operational?

*Gerald P. Bodey Sr., MD*

0:05:54.9
I think we started in 1977.

*Tacey Ann Rosolowski, PhD*

0:05:58.1
Yeah, that’s what I have, 1977.

*Gerald P. Bodey Sr., MD*

0:06:04.4
And they put the additional building that’s there now—it happened after I retired. It was around that time.

*Tacey Ann Rosolowski, PhD*

0:06:16.5
So it operated almost twenty years?

*Gerald P. Bodey Sr., MD*

0:06:17.9
They still use that. They have a semi-unit now, but it’s not sophisticated. This, I think, has just filtered air or something along those lines.

*Tacey Ann Rosolowski, PhD*

0:06:31.2
Now, were there studies that you ran with the—?

*Gerald P. Bodey Sr., MD*

0:06:34.8
Oh, yeah.
Tacey Ann Rosolowski, PhD
0:06:35.2
So what kinds of trials did you run with the patients in the units?

Gerald P. Bodey Sr., MD
0:06:38.5
The same sort of thing—chemotherapy results and infectious disease results and so on. We did all—well, we did a lot of other things too, environmental kinds of things. We did studies on the air, studies on the floor.

Tacey Ann Rosolowski, PhD
0:06:59.5
Why? And what kinds of studies did you run?

Gerald P. Bodey Sr., MD
0:07:04.7
These kinds of studies were bacterial. We did studies on the skin of the patient’s, how much contamination there was, and what different regimens did in eradicating organisms on the skin, the frequency of infections, and all that sort of thing. I wrote, I guess, somewhere around eight papers. Again, they’d be in those archives if they’re still in existence. I don’t have any of that material anymore.

Tacey Ann Rosolowski, PhD
0:07:41.8
And when you studied things in the floor—the environmental things—you were interested in like how long they’d stay sterile?

Gerald P. Bodey Sr., MD
0:07:48.6
We actually would—we painted squares on the floor, then we’d go and wipe over them with moist cotton and then put it into a container and grow it and see what grew in there and see how sterile the environment actually was.

We did water samples. The water was filtered with these same kind of filters I mentioned earlier, to eliminate any organisms. We were interested in whether doing all these things made a difference in terms of the patients’ outcomes. And we studied the skin flora. If my memory serves me correctly, and I’m sure it does, we divided the body up into twelve parts, and then we’d send a technologist in with cotton balls—then she would dip it in a little sterile water, rub it
over the patient, and then bring this material in for culture. So we would be able, actually, not only to identify the organisms but to quantitate the amount of contamination that was present. We did a lot of studies of that nature. I’m not sure how beneficial they were in the end.

The way the room was designed was the outer side included a window in it, and that was the side that the relatives came in. There was a telephone connection so you could talk back and forth. On the inner side, there was a plastic curtain with armlets in it so that you could do all the procedures and all that you wanted to do on the patient. There was a door into the room, but we didn’t go into that regularly. The patient had a sink there and had a water supply that had been sterilized. It was a fairly well-designed unit. Then of course the one wall was all the filtered air system. The basic problem was those rooms were expensive to maintain, and ultimately, those in the administration that were concerned about funding had other priorities than this. They finally won the battle, and the unit was shut down.

Tacey Ann Rosolowski, PhD
0:10:25.5
Was your feeling that it made a difference? Were you sorry the administration shut it down?

Gerald P. Bodey Sr., MD
0:10:30.2
It made a difference, but I’m not sure that it was worth the expense and effort and all, because we had a separate kitchen with a dietician. We had to have special nurses. I mean, it was a very expensive operation. My conclusion basically, would be that, yes, it did have some benefit, but the benefit wasn’t worth the expense and the difficulties associated with it.

Tacey Ann Rosolowski, PhD
0:11:04.1
Now what would be done since those units are not available?

Gerald P. Bodey Sr., MD
0:11:10.2
I really can’t tell you that because I retired right around the time they started doing that, and I haven’t been involved at all since then.

0:11:28.2 (End of Audio 2 Session 1)
Chapter 05
A: The Researcher
Outreach Overseas and Some Post-Retirement Activities

Story Codes
A: Activities Outside Institution
A: Overview
A: Career and Accomplishments
A: Post Retirement Activities
C: Dedication to MD Anderson, to Patients, to Faculty/Staff
C: Personal Reflections, Memories of MD Anderson
A: Personal Background
B: MD Anderson Culture
B: Growth and/or Change

Tacey Ann Rosolowski, PhD  
0:00:00.2  
Turn on the recorder?

Gerald P. Bodey Sr., MD  
0:00:00.8  
You can put it all in.

Tacey Ann Rosolowski, PhD  
0:00:02.0  
Okay.

Gerald P. Bodey Sr., MD  
0:00:02.4  
Europeans got this cancer treatment group that involved multiple nations of Europe. They did the same sort of thing that we did in terms of investigating new antitumor agents. Sometimes a new antitumor agent came from Europe, and they might have first crack at it. Then they developed an infectious disease group within that EORTC. Dr. Jean Klastersky, from Belgium—Brussels—was the leader of that group.

Tacey Ann Rosolowski, PhD
How did you become connected with this group? It was called, just for the recorder, the European Organization for Research on Treatment of Cancer. How did you become—?

Gerald P. Bodey Sr., MD

They had some interactions with the chemotherapy group. There were several chemotherapy groups here in the United States. We were with the Southwestern group, but there were several others. They were predominantly geographical, but not completely. We had some members that were in Ohio and some places like that, but they were sort of geographical. I don’t remember exactly how many of them there were, but probably four or five of them. So we had some interactions from time to time with the European group. Sometimes there would be conferences or something over there. I gave lectures several times over at their conferences. Sometimes we would have some of them coming over here. There was a certain amount of informational flow between the EORTC and some of the groups here in the United States. Particularly, they had, I’m sure, some interactions with the National Cancer Institute, but the NCI had its own investigational drug program there, because they still had wards of cancer patients at NIH.

Tacey Ann Rosolowski, PhD

So the Antimicrobial Therapy Project Group—can you tell me what sort of initiative was that? What was its purpose?

Gerald P. Bodey Sr., MD

Well, that was just doing the same sort of thing that we were doing, but a lot of the—well, some of the institutions there didn’t have anywhere near the size of population of cancer patients available to them that we had here, so they joined together, whereas we never had a multi-institutional infectious disease group here in the United States. Each one of the institutions—some of them didn’t have any particular interest in doing studies, and those that did had their own. So there were some people at the National Cancer Institute, the Baltimore Cancer Research Center, and—I don’t know—maybe two or three others around the country, but they all worked independently.
What as your view of that? Do you think it would have been more effective for people to join together?

_Gerald P. Bodey Sr., MD_
0:03:53.0
We didn’t pursue that because we had enough patients of our own. We didn’t need any others. You always—it gets into issues of one person wants to do one thing and you want to do something else and all that kind of stuff. So here in the United States, the institutions that did this had large enough centers that they could do their own study. Now, some of them didn’t have as large a center as we did, but they had at least 75% of the population that we had. So I think the basic issue was that none of them really felt like they wanted to do cooperative work. Now, if you’re doing them by yourself, then you had the freedom to do what you wanted to do, write the papers, and so on. There weren’t any collaborative groups, at least not any that we participated in.

_Tacey Ann Rosolowski, PhD_
0:04:49.1
Interesting. Now, you mentioned that you had gone overseas a number of times to lecture. I know that actually, international activities were a pretty big part of what you did. I was going through your CV, and you had connections with the UK, Canada, Peru, Costa Rica, Brazil, Brussels, and the Multinational Association of Supportive Care. Was international outreach an important thing for you?

_Gerald P. Bodey Sr., MD_
0:05:22.8
Part of the importance of it was I got the opportunity to go and see some other countries.

_Tacey Ann Rosolowski, PhD_
0:05:28.5
I know. That’s cool.

_Gerald P. Bodey Sr., MD_
0:05:30.2
But yeah, it’s nice to have interactions with these people working in the same area in other countries. I had some—these people were friends of mine over the years. We never had any
collaborative studies, but we had interests in the same drugs sometimes and so forth. I must say that most of the lecturing was in a one-way direction. There weren’t too many times that they were invited over here. The one advantage that I had was that we had a much larger population than most of these European institutions. The other thing was, too, that the pharmaceutical companies footed the bill. They were interested in having me go and tell other people what our experience was with their new drug or something. So that played a role as well.

*Tacey Ann Rosolowski, PhD*
0:06:35.1
Did you find that the US work was more advanced in comparison to the work being done in Europe?

*Gerald P. Bodey Sr., MD*
0:06:41.1
No. I mean, there may have been some occasions where that was true. We may have been ahead of the others, and we got an earlier start at it, but the people who were working in this field specifically were just as qualified as we were, and they knew what to do and did it properly.

*Tacey Ann Rosolowski, PhD*
0:07:01.3
Were there any instances in which you felt you really learned something significant or had some kind of impact from going overseas, either on your work or in a more personal way?

*Gerald P. Bodey Sr., MD*
0:07:15.2
Well, it was beneficial to get to know some of these people. I mean, I’m still—not so much now anymore, but Dr. Klastersky in Brussels and I had a good relationship over the years, and there were a couple others likewise. I don’t know that he learned anything from me or I learned anything from him that was all that important, but it was encouraging to see that you were getting similar kinds of results with the drugs and so on. I think that was worthwhile. Then of course there are international medical organizations. One is the International Cancer Chemotherapy Group. They have a meeting I used to go to the regularly. I think it was every other year or something. People would come from all over to present material. So there was always some interchange between what was going on in Europe and here in the United States.
Let’s talk about your activities after you retired, because you told me when we first sat down that you actually kept going into MD Anderson even after your formal retirement date of 1995. So tell me what you were involved in.

Gerald P. Bodey Sr., MD
0:08:49.8
I don’t think that’s terribly interesting. I didn’t do anything very dramatic. I would go in and participate in some of their meetings and so on and meet with individuals. Sometimes somebody wanted my input into some study they wanted to do or something like that. I still gave lectures for several years after I retired. I gave my last lecture this year. I said, “Now, this is it.” I gave a lecture at the Infectious Diseases Society of America meeting in Boston. I said that was the last time I was doing that. I’ve sort of hung up my hat now.

Right now—this past year had been a little unkind to me in terms of some health matters I won’t go into. I am at the point now where I’m kind of looking at what I might be able to do with some of my time, but it would be more related to the activities of the church or something like that. I’ve closed the door down there. What happened was that—you know—it’s twenty-five miles down to MD Anderson from here, and I would drive down there and go in my office area and nobody was there. Nobody would be there all day because the amount of patient care work, I think, has increased substantially. When I was there—most of the time I was there—while I was taking care of patients, I still had a couple hours a day that I could work in the laboratory or write a paper or whatever. Of course, I did an awful lot of writing at home at nighttime too. I would guess maybe somewhere around 50% of my publications were actually written during off hours. But it got to the point that I was going down there, and there was nobody to talk to or anything. I thought, “Well, this is kind of crazy to drive twenty-five miles down there and sit and look at the wall.”

Tacey Ann Rosolowski, PhD
0:11:05.6
Sure.

Gerald P. Bodey Sr., MD
0:11:08.4
So that’s when I sort of, kind of reluctantly, decided it’s time to terminate things.

Tacey Ann Rosolowski, PhD
0:11:16.1
To what do you attribute that? I mean, you said a vast increase in the responsibilities of patient care, but why did that come about, do you think?

**Gerald P. Bodey Sr., MD**

0:11:23.5

The institution has grown, and not only in terms of the hospital patients themselves, but the outpatient program has really expanded. I hadn’t been down for a while, and I go down, and here’s this whole new building just for outpatients. We didn’t have anything like that when I was working. I think that’s probably—I don’t have the figures, and I haven’t seen the figures, but I would assume that a large part of this is a major increase in outpatient services. So if people are in Infectious Diseases and they have to go and have clinics to take care of these patients, sometimes you have to drop everything and go somewhere because the patient’s there now and he’s going back to Timbuktu—that sort of thing. It had to do with the size of the institution, the number of patients, and so on.

**Tacey Ann Rosolowski, PhD**

0:12:24.6

What other changes in the institution did you notice? You were involved for a very long period of time and saw it grow even during that span from 1966 to 1995.

**Gerald P. Bodey Sr., MD**

0:12:38.9

That is the thing. The institution has grown so much over the years that it’s just amazing to me. I mean, there are areas of the institutions I’ve never been in, and then they have several other buildings. As I mentioned before, the outpatient burden has gotten much, much greater than it had been. So I don’t have any—have not seen any figures in terms of how many patients they’re seeing compared to what they saw ten years ago, but it doesn’t take a genius to figure out that there’s been a major increase.

**Tacey Ann Rosolowski, PhD**

0:13:22.1

Was there a change in atmosphere or culture, even from the time you began until the time you retired?

**Gerald P. Bodey Sr., MD**

0:13:30.7
Not too much during that time, no. Somewhat, because again, even over that period, the institution had expanded. But from what people tell me, there’s been a major change now. The thing has mushroomed.

*Tacey Ann Rosolowski, PhD*

0:13:46.0
The corporatization and—we’re almost to two hours, would you like to stop for today and restart?

*Gerald P. Bodey Sr., MD*

0:13:57.7
Well, I think I better. My voice is beginning to sound a little raspy.

*Tacey Ann Rosolowski, PhD*

0:14:01.8
All right. Well, we don’t want that to happen. You need to go get some ice cream or something.

*Gerald P. Bodey Sr., MD*

0:14:05.1
Next time I need to have some water.

*Tacey Ann Rosolowski, PhD*

0:14:07.3
I’m sorry. I should have—

*Gerald P. Bodey Sr., MD*

0:14:08.6
That’s all right.

*Tacey Ann Rosolowski, PhD*

0:14:09.1
Here you go. I haven’t had a drink. So help yourself.

*Gerald P. Bodey Sr., MD*

0:14:12.1
Well, you take it now. I can get some more.

*Tacey Ann Rosolowski, PhD*
0:14:14.3
All right. Did you have something else you wanted to say?

Gerald P. Bodey Sr., MD
0:14:19.7
No, not really. I don’t know if you want to get into issues of where I traveled and that sort of thing, but you have my curriculum vitae and that tells pretty much everything that’s important. The one thing that’s happened this year that pleased me was that I was selected as the Distinguished Alumnus of my last year at Hopkins. Now, that isn’t saying very much, because at this point in time half of the people have died already. I had to wait this long in order to get it, but it’s nice.

0:16:17.9 (End of Audio Session 1)
Chapter 6
A: The Researcher
Research on Bacterial and Fungal Infections

Story Codes
A: The Researcher
C: Discovery and Success
A: Overview
A: Definitions, Explanations, Translations
C: Patients
C: Patients, Treatment, and Survivors
A: Character, Values, Beliefs, Talents

Tacey Ann Rosolowski, PhD
0:00:00.7
So what’s the title of this paper?

Gerald P. Bodey Sr., MD
0:00:03.4
This is a very interesting paper and of some importance because it reported a patient who had acute myelogenous leukemia and went into bone marrow remission. But his blood counts failed to recover, and he was still febrile and not doing well. It was finally determined that he had hypersplenism due to disseminated candidiasis, and had Candida in his spleen and liver and all that stuff. They did a splenectomy on him, and when they took his spleen out his blood counts all returned to normal and his candidiasis responded to amphotericin B therapy, and he went into remission and did well. That was a somewhat unusual case that made us alert to that as a possibility in the future.

Tacey Ann Rosolowski, PhD
0:00:59.7
Did that actually become part of the treatment with individuals who had this very acute fungal infection?

**Gerald P. Bodey Sr., MD**

0:01:07.5

Well, we were very aggressive about treating fungal infections when we knew they were present. I don’t know how many cases like this we saw. This is really a very unusual case.

**Tacey Ann Rosolowski, PhD**

0:01:23.4

How did this particular case help you understand cases that were less acute?

**Gerald P. Bodey Sr., MD**

0:01:33.9

I think I was somewhat alert—well, really the most important point in this paper was the fact that he had persistent low blood count.

**Tacey Ann Rosolowski, PhD**

0:01:55.4

Oh, okay.

**Gerald P. Bodey Sr., MD**

0:01:56.0

And so it was not possible to treat his fungal infection adequately until his blood counts recovered. So they took his spleen out, his blood counts came up, and then amphotericin B therapy worked for him. He remained in remission then for six months after the splenectomy, but then his leukemia recurred again. There’s a photograph of the spleen. These are *Candida* lesions.

**Tacey Ann Rosolowski, PhD**

0:02:37.9

Oh my gosh. So that really shows what the fungal infection can do. It actually attacks—
Yeah, what was a little extraordinary is the fact that there weren’t any obvious signs of the fungal infection. I’m not quite sure anymore why I was smart enough to figure out that he had a problem with his spleen and needed a—

*Tacey Ann Rosolowski, PhD*  
0:03:11.3

What do you think helped you identify that?

*Gerald P. Bodey Sr., MD*  
0:03:13.9

Probably my experiences at the National Cancer Institute, where I did clinical studies such as this one on the causes of death in acute leukemia.

*Tacey Ann Rosolowski, PhD*  
0:03:26.4

If you would hang on just one moment, Dr. Bodey, I would like to read for the record the title of this paper that we were just discussing, which is “Hypersplenism Due to Disseminated Candidiasis in a Patient with Acute Leukemia,” and the co-authors with Dr. Bodey are David Dejongh, Adolfo Isassi, and Emil Freireich. Okay, thank you. So now, that next paper you were going to be talking about?

*Gerald P. Bodey Sr., MD*  
0:04:27.4

The next one is the causes-of-death paper. This was actually done at the National Cancer Institute. We reviewed the cause of death in 414 patients with acute leukemia, and 70% of the patients the cause of death was infection, 52% of them had hemorrhage, and then in 38% of the patients there was more than one cause leading to their death.

*Tacey Ann Rosolowski, PhD*  
0:04:27.4

And what was the research question of this particular study?

*Gerald P. Bodey Sr., MD*  
0:04:32.9

Really to define the frequency of infections causing death in the patient population, and then they did lead to some approaches to treatment that improved the outcome.
Tacey Ann Rosolowski, PhD
0:04:50.8
So this was done at the NCI when you were working with—

Gerald P. Bodey Sr., MD
0:04:56.7
Dr. Freireich. For example, hemorrhage as a cause of death decreased during the course of the study because they were beginning to give platelet transfusions to patients who had inadequate platelets. Of course, then also it gave us some information on the kind of infections that were most likely to be causing these patients—so that we would know what kind of antibiotics to administer, even before we actually had the definite diagnosis.

Tacey Ann Rosolowski, PhD
0:05:33.8
Oh, okay. Now I’d like, too, to talk about that key 1966 study. Is that the one, the quantitative relationships?

Gerald P. Bodey Sr., MD
0:05:54.4
That’s this one, yeah.

Tacey Ann Rosolowski, PhD
0:05:55.7
Yeah, if you could just tell the title of that paper, and then talk a little bit about what was so significant about that?

Gerald P. Bodey Sr., MD
0:06:05.2
See, the problem that we’re getting into is that everything we’re talking about is stuff that was done before I came to MD Anderson.

Tacey Ann Rosolowski, PhD
0:06:12.1
Right, but I think that’s really important because it was really the foundation of the work that both you and Dr. Freireich did later too, isn’t it?

Gerald P. Bodey Sr., MD
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0:06:19.2
Well, it is, but I'm not sure that it meets the objectives of a book that's supposed to be about MD Anderson. Isn't that right?

Tacey Ann Rosolowski, PhD
0:06:31.2
No. I mean, because it's also about your career too. This was so foundational; I think it's really significant. It's also really important how many times it's been cited. It's really a foundational kind of study.

Gerald P. Bodey Sr., MD
0:06:44.2
Okay, well then—let's see what we have. Well, this one was a study in which we looked at fifty-two patients from the time of their admission to their death. And we looked at the relationship between the white blood cell counts and infection. These were all patients with acute leukemia. We were able to show that—here it is—the chart that shows the relationship between infection and the white blood count.

Tacey Ann Rosolowski, PhD
0:07:36.2
Wow, so it really—

Gerald P. Bodey Sr., MD
0:07:41.0
Actually, this is the neutrophil count, which is one element.

Tacey Ann Rosolowski, PhD
0:07:44.1
Right.

Gerald P. Bodey Sr., MD
0:07:45.1
It's the one that fights infection.

Tacey Ann Rosolowski, PhD
0:07:46.6
Right. So it really drops amazingly with that. So what was so unusual and landmark about this particular study?
Well, I don’t know. I mean, we all knew that the patients who didn’t have any neutrophils (granulocytes) were at higher risk of infections. But this gave us quantitative figures and gave us ideas of at what level a patient is less likely to get into troubles with infection. The cutoff point was around 1000. This then helped us also if a patient had some fever and he had a neutrophil count of less than 100, then we needed to really get busy and treat him intensively with antibiotics, because otherwise he’s going to die.

And when Javier at the archives printed out the citations in a list that showed how often this paper had been cited—it’s been cited over 1400 times.

Because to my knowledge, it’s the only paper that really gave quantitative values. People knew some of this. The information wasn’t all that earth shaking, but this actually gave quantified data of what the results were and also the outcomes. This side actually looks at the duration of low counts. You know, the longer you had a low count the greater your chances of getting an infection. Again, not any earth-shaking information, but it does quantify it.

Which gives you some real guidelines.
So that paper was published in 1966, and just let me read the title for the record. This is “Quantitative Relationships Between Circulating Leukocytes and Infection in Patients with Acute Leukemia,” and the co-authors with Dr. Bodey—who is first author on this paper—are Monica Buckley, Y.S. Sathe, and Emil J Freireich. And this was published while all of these authors were at the NIH.

Gerald P. Bodey Sr., MD
0:10:19.3
And that’s an important point, too, because it would have been difficult to do these studies almost anywhere else at that time.

Tacey Ann Rosolowski, PhD
0:10:26.2
Why?

Gerald P. Bodey Sr., MD
0:10:26.7
Because we had an acute leukemia service at the National Cancer Institute, so we had patients who had been referred from all over the United States that came. I don’t think there was any other institution that had as high a concentration of patients with acute leukemia as did the National Cancer Institute, at least at that particular time.

Tacey Ann Rosolowski, PhD
0:11:01.2
Right, because then MD Anderson started.

Gerald P. Bodey Sr., MD
0:11:07.4
Well, they began establishing it and getting it moving.
Tacey Ann Rosolowski, PhD
0:11:10.8
Right, okay. What’s the next paper? Actually, here’s the press release.

Gerald P. Bodey Sr., MD
0:11:19.4
Well, that was after—

Tacey Ann Rosolowski, PhD
0:11:20.7
This is the carbenicillin. Can you tell me about this one? We talked about carbenicillin the last time.

Gerald P. Bodey Sr., MD
0:11:28.9
Carbenicillin was really a very important advance because the antibiotics that we had available that were active against Pseudomonas prior to that were not very effective in the neutropenic patients in particular. Carbenicillin had activity even in neutropenic patients. For drugs like polymyxin, which had activity against Pseudomonas—but if they didn’t have an adequate number of neutrophils, then it wasn’t very effective. Whereas with carbenicillin, even if you didn’t have very many neutrophils, carbenicillin would still be effective if the organism was sensitive to that antibiotic. So it really had a major impact because Pseudomonas was one of the most common infections—maybe the most common infection—at that time. Originally Staphylococcus was, but after methicillin became available and some of the other anti-staph medications, then there was a major drop in staph infections. Then Pseudomonas began to emerge as the most dangerous organism to leukemic patients. It became fairly common, and it was not responding to antibiotics until carbenicillin came along.

Tacey Ann Rosolowski, PhD
0:13:02.7
Now, let me ask you—because it kind of surprised me to see that photograph of the spleen that had that kind of encrustation with the fungus—did the bacteria also attack organs in that same way?

Gerald P. Bodey Sr., MD
0:13:14.5
Typically you wouldn’t have those large lesions; they would just be little pinpoints. Some of them would have localized abscesses in an organ like the spleen or liver.
Tacey Ann Rosolowski, PhD
0:13:27.9
Because I actually had no idea of exactly what these kinds of bacteria or fungi would do inside the body. I mean, when I hear, “You have an infection,” I think of a patient having a serious fever, but I don’t think of the organs being attacked.

Gerald P. Bodey Sr., MD
0:13:42.6
They could be—not only the liver and spleen but the lungs. It could be really any organ in the body. Some of them get infections in the brain—meninges. So it was possible for a variety of organs to be involved. Of course, the chances of responding depended somewhat on what organs were a major source of infection, as well as the organisms itself and its susceptibility to antibiotics.

Tacey Ann Rosolowski
0:14:21.5
Now, you showed me that graph that showed that the longer a patient had an infection or the longer the patient had low neutrophils the greater the risk—

Gerald P. Bodey Sr., MD
0:14:31.5
— the greater the risk of them getting an infection.

Tacey Ann Rosolowski, PhD
0:14:33.8
And I assume that would also mean greater the risk of getting a very serious one that would attack these organ systems, or was that not necessarily the case?

Gerald P. Bodey Sr., MD
0:14:40.5
Not necessarily true. That would depend on things like the organism’s susceptibility to antibiotics and that sort of thing. It could be—it often was a very serious infection, but it didn’t always have to be.

Tacey Ann Rosolowski, PhD
0:14:54.7
Now, you had given me a photocopy of an article that appeared in the *Houston Chronicle*, and maybe you can tell me about that. It was related—

Gerald P. Bodey Sr., MD  
0:15:04.9  
That’s from the *Houston Post*.

Tacey Ann Rosolowski, PhD  
0:15:06.0  
Oh, the *Houston Post*.

Gerald P. Bodey Sr., MD  
0:15:06.7  
This goes way back to the days when we had the *Houston Post*.

0:15:17.2 (End of Audio 1 Session 2)

Gerald P. Bodey Sr., MD  
0:00:02.8  
But Mary Jane Schier was—I don’t know if you know her or not.  
Tacey Ann Rosolowski, PhD  
0:00:06.2  
I do.

Gerald P. Bodey Sr., MD  
0:00:06.8  
She was a *Post* reporter at that time. I knew her for her associations with MD Anderson and all. She interviewed me about this use of carbenicillin and its impact on leukemic patients. However, she got a little mixed up in what she reported. I won’t go into that, but it was published on a Sunday morning in the paper, and it was a front page headline. I got up and got the newspaper and almost had a stroke when I saw this. I was embarrassed going to church that morning, because it was a headline in the newspaper. And actually, it got circulated around. I started getting letters and all from all over the world—

Tacey Ann Rosolowski, PhD  
0:00:59.5  
I bet.
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Gerald P. Bodey Sr., MD
0:01:02.7
—that had become aware of this article.

Tacey Ann Rosolowski, PhD
0:01:04.5
And the headline is “Leukemia Victims Get New Hope,” and then the subtitle is, “A drug is revolutionizing treatment of leukemia.”

Gerald P. Bodey Sr., MD
0:01:14.7
That’s the problem. It wasn’t treating leukemia; it was treating the infection.

Tacey Ann Rosolowski, PhD
0:01:17.4
It’s treating the infections, yes. Right. So what kind of letters did you get from people? What were they asking?

Gerald P. Bodey Sr., MD
0:01:24.3
Some of them—there weren’t a lot of letters, but there were some. They would be asking me for advice or could they get the drug—those kinds of things. There was one aspect of it that really upset me. I had the original copy of the paper and the letters that came and all that sort of thing, and there were some letters, I think, to the editor and all that. I had them in a box in my secretary’s office, and they were there for years. Then we got a new, young secretary—junior secretary—and one day, without consulting anyone else, she took the box and threw it out. I almost had a stroke.

Tacey Ann Rosolowski, PhD
0:02:11.5
I don’t believe it.

Gerald P. Bodey Sr., MD
0:02:12.6
And my—and two of my secretaries actually went down into the trash bin at Anderson to see if they could find this box. They spent over an hour going through the trash trying to find this box, and they could never find it.

Tacey Ann Rosolowski, PhD
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0:02:25.6
Gosh.

Gerald P. Bodey Sr., MD
0:02:26.2
That just really, really upset me, because this was something special. I could not get another copy of the paper. Fortunately, some years later—and unfortunately, I don’t remember her name—but there was somebody doing some work at MD Anderson, sort of like you’re doing, and they went into the archives of the newspaper and came across this article and was able to make a copy of it. That’s how I have that. But I was really—they thought I was going to kill this girl. I mean, I was really upset, because we had kept it for—at that time, at least five or six years. I couldn’t duplicate it, and that was the most important thing I ever had happen to me—the front page headline.

Tacey Ann Rosolowski, PhD
0:03:09.4
Right. Wow. Well, I’m glad you were able to eventually get a copy.

Gerald P. Bodey Sr., MD
0:03:18.9
Now, I don’t know what all you want to do with this big pile, but here’s a paper on the first protected environment, so-called “life islands.”

Tacey Ann Rosolowski, PhD
0:03:28.4
Sure.

Gerald P. Bodey Sr., MD
0:03:29.2
And there’s reporting on the results of the—

Tacey Ann Rosolowski, PhD
0:03:31.8
What date is that paper?

Gerald P. Bodey Sr., MD
0:03:33.1
This was on July 1968. And this reported the first eleven patients who were in these so-called “life islands,” on oral antibiotics to try to limit any infections from occurring. I think we talked about how that operated and so on.

*Tacey Ann Rosolowski, PhD*

0:04:02.3

We did, yes.

*Gerald P. Bodey Sr., MD*

0:04:04.1

And this paper reports that the effects of the antibiotic regimens on the strains of organisms in the patients and that sort of thing. For example, that suppressed 92% of the organisms in the GI tract, and 88% from nose cultures, so that’s the most important things—66% of throat cultures. But the patients had to stay on the antibiotics the entire time. If you stopped them, then some of the organisms would grow back again. They really didn’t have—they tolerated the antibiotics well, and as I said, the effect of them—I don’t know that this paper actually looked at anything else, like infections or anything. I don’t see anything here. So it was mainly just the impact on the patient’s organisms when they went into the unit.

*Tacey Ann Rosolowski, PhD*

0:05:25.9

Let me just read the title of this for the record, “Protected Environment for Cancer Patients: Effect of a Prophylactic Antibiotic Regimen on the Microbial Flora of Patients Undergoing Cancer Chemotherapy.” Dr. Body is the first author, and then the second and third authors are John Loftus, MD, and Eleanor Bowen, MS.

*Gerald P. Bodey Sr., MD*

0:05:59.6

Now, while you’re on that, we had one patient that stayed in this life island—a patient with acute leukemia—for 216 days. I think I’ve mentioned to you the last time around—216 days. I don’t know how on earth he ever tolerated being in for that long.

*Tacey Ann Rosolowski, PhD*

0:06:20.4

Tell me, what was the effect—the psychological effect—on patients? What did they—?
Most of them tolerated. We did have a rare patient who just couldn’t tolerate that isolation. Of course, we screened them pretty carefully before we selected them.

*Tacey Ann Rosolowski, PhD*

0:06:37.3

How did you do that?

*Gerald P. Bodey Sr., MD*

0:06:38.1

Because they could see things—there was at least one area of the room which they could look out and see what was going on, and they had nurses coming in and talking to them, and the doctors and so on, so they weren’t totally isolated that they didn’t see anybody. Obviously, their lives were very restricted, but during the—I don’t know—maybe we had to remove one or two patients prematurely, but the vast majority of them tolerated it quite well.

*Tacey Ann Rosolowski, PhD*

0:07:07.8

Now, you said you screened the patients. How did you do that?

*Gerald P. Bodey Sr., MD*

0:07:11.8

Well, the biggest question was their disease and what is the remission rate in this form of leukemia and things like their age. Elderly patients were less likely to respond than young ones. And did they already have an infection or not? The biggest factor to whether they got to go in a room or not was whether there was a room available. That played a role. But then later on, as we had different antileukemic regimens, then we would tend to put the patients in the unit if they were getting their first course of leukemia therapy, where they had the greatest chance of going into remission. So we didn’t usually put in patients who had relapsed and were going to get treated again. That was primarily reserved for first-time treatments. Then we got into some other cancers—lymphoma—we started doing some studies on, too.

*Tacey Ann Rosolowski, PhD*

0:08:24.6

The one thing we didn’t talk about last time was the work on chemotherapy that you did. Do you have any articles in that stack on your chemotherapy work?

*Gerald P. Bodey Sr., MD*

0:08:35.0

Possibly so, but you’ll have to give me a couple of minutes here.
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Tacey Ann Rosolowski, PhD
0:08:37.3
Yeah, let me pause it, and then we can look through. I’m just pausing the recorder at 2:20.

0:08:42.7 (End of Audio 2 Session 2)

Gerald P. Bodey Sr., MD
0:00:01.8—heavily involved in taking care of the patients who were getting the treatment. The regimens were generally things that were developed by Dr. Freireich. He was the one who did that, but I was—spent a good bit of my time taking care of those patients. This is an interesting one. I don’t know that you want to go into any detail, but we developed a method—a semi-quantitative culture of patient’s total body skin. We divided the body up into different sections, and then we would take forceps, put a piece of cotton on it, and then moisten it and rub it over that area of the body, then put it in a liquid culture.

Tacey Ann Rosolowski, PhD
0:00:55.8
So the name of this study is “A Semi-Quantitative Total Body Skin Culture Technique for Patients in a Protected Environment.” Now, what was the aim of this? I don’t understand semi-quantitative total body skin culture.

Gerald P. Bodey Sr., MD
0:01:09.1
Well, it was semi-quantitative, meaning it wasn’t totally accurate. It was a good estimate, but it couldn’t say, “Well, this is exactly how many they have.”

Tacey Ann Rosolowski, PhD
0:01:19.2
So how many would somebody have on their entire skin surface? Was that the idea, approximately?

Gerald P. Bodey Sr., MD
0:01:27.1
Approximately, because that was then a way of measuring the efficacy of our antibiotic therapy, particularly the cleansing therapy of the skin. A lot of this—I must say, looking back on it, it wasn’t terribly earth shaking, but it was of interest at that time, because nobody had done any of this before. And it was quite a bit of work.

Tacey Ann Rosolowski, PhD
0:01:54.0
Well, it’s—I mean, it’s kind of interesting, because now there’s so much information on the Internet and in the news about how we’re not really individual organisms, we’re actually multiple organisms because of all the creatures living on our skin. So this was kind of the preliminary work in quantifying that.

Gerald P. Bodey Sr., MD
0:02:16.2
Now, here is a paper that talks about the outcome of therapy with carbenicillin.

Tacey Ann Rosolowski, PhD
0:02:23.5
Okay.

Gerald P. Bodey Sr., MD
0:02:24.8
We treated fifty-six episodes, and the response rate was 91% in the twenty-three episodes of Pseudomonas infections.

Tacey Ann Rosolowski, PhD
0:02:34.9
Wow. So it was really effective.

Gerald P. Bodey Sr., MD
0:02:38.0
Then 58% in twelve episodes of E. coli. But the big thing—and it wasn’t effective in Klebsiella and a couple other organisms. The big thing was the results on Pseudomonas. That was dramatic, because prior to carbenicillin, almost every patient who got a significant Pseudomonas infection died.
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Let me just read the title of that paper, “Carbenicillin Therapy, A Gram-Negative Bacilli Infections.” And the authors are Dr. Bodey, V. Rodriguez, and J. K. Luce. This paper was published in 1969 in the *American Journal of the Medical Sciences*.

*Gerald P. Bodey Sr., MD*  
0:03:21.8  
And we did all kinds of studies. I don’t think you want to spend too much time on these microbiological studies. This was one on our patients, and—

*Tacey Ann Rosolowski, PhD*  
0:03:33.1  
Okay, well, let’s—I’ll pause the recorder, and then we can look through for some chemo—

*Gerald P. Bodey Sr., MD*  
0:03:38.5  
There’s an awful lot in here.

0:03:40.9 (End of Audio 3)
Chapter 7
A: The Researcher
Research on Chemotherapy and Anti-Fungal Therapy

Story Codes
A: The Researcher
C: The Clinician
C: Discovery and Success
A: Overview
A: Definitions, Explanations, Translations
C: Patients
C: Patients, Treatment, and Survivors
A: Character, Values, Beliefs, Talents

_Gerald P. Bodey Sr., MD_
0:00:00.6
Here is an important study. I think we may have already touched on this one—the cause of death in cancer patients.

_Tacey Ann Rosolowski, PhD_
0:00:07.9
Oh, interesting. Okay.

_Gerald P. Bodey Sr., MD_
0:00:09.6
We studied 816 cancer patients who underwent an autopsy. Forty-seven percent of them died of infections, organ failures in twenty-five percent. The most common fatal infections were pneumonia, septicemia, and peritonitis. The majority of infections were _E. coli, Pseudomonas_, and _Klebsiella_.

_Tacey Ann Rosolowski, PhD_
0:00:42.0
Now, when you said 47%, was that 47% percent of the patients died of infections?
Tacey Ann Rosolowski, PhD  
0:00:55.8
That’s amazing. That’s an amazing statistic. So after all of your work on the various antibiotics and antifungals, how did you have an impact on that figure, do you think? Were you able to get it down below that 47%?

Gerald P. Bodey Sr., MD  
0:01:18.6
The treatment of infections improved considerably over the years, because one of the first things that was demonstrated—and I think we were the ones that were largely responsible for presenting that—was the fact that you started treating these patients who were neutropenic with antibiotics when they developed fever, not waiting until you had culture results back. If you waited until the results of the cultures came back, some of them were already dead. So that was a very important aspect that evolved from a lot of this work.

This one here is the causes of death in cancer patients. We went over some of that. I’m not going to repeat that again.

Tacey Ann Rosolowski, PhD  
0:02:24.3
Let me just pause the recorder for a minute while you’re looking.

0:02:26.7 (End of Audio 4 Session 2)

Gerald P. Bodey Sr., MD  
0:00:00.5
This is an interesting study. This is Dr. Freireich’s.

Tacey Ann Rosolowski, PhD  
0:00:05.5
Okay. So you said this is a particularly interesting study. Why?

Gerald P. Bodey Sr., MD  
0:00:08.6
Because we had twenty-nine patients who were in complete remission of acute leukemia for at least one year and received what we call “late intensification therapy.” We came back to see if
we could have a major impact. After that, then they received no more chemotherapy. Fourteen patients were still in remission when this was written, but I don’t know how long that was.

_Tacey Ann Rosolowski, PhD_
0:00:35.1
Now, was this a chemo study or a study of the infections?

_Gerald P. Bodey Sr., MD_
0:00:41.2
No, this was a chemotherapy study.

_Tacey Ann Rosolowski, PhD_
0:00:42.5
A chemotherapy study. I see.

_Gerald P. Bodey Sr., MD_
0:00:43.9
The length—fourteen patients—the length of remission was at least sixty weeks after the late intensification, with a median period of time of ninety-eight weeks. For the control group, it was only forty-four weeks. So that had a—

_Tacey Ann Rosolowski, PhD_
0:01:10.3
So what exactly was the treatment that was being studied there? I wasn’t clear on that part.

_Gerald P. Bodey Sr., MD_
0:01:16.0
I’m not sure. I’m sure it’s written in here somewhere. We had two different regimens, depending on—that were used. I don’t know that we need to go into that so much. But it was standard chemotherapy for acute leukemia. It wasn’t something unique. It was regimens that we were using in leukemia patients. What was unique was coming along at that point—after they had been in remission for a while—and giving them an intensive course of therapy to see if we could then lengthen the duration of their remissions. And we were able to demonstrate that.

_Tacey Ann Rosolowski, PhD_
0:01:55.0
Let me just read the title of that—

_Gerald P. Bodey Sr., MD_
0:01:58.1
That’s Dr. Freireich’s, not mine.

*Tacey Ann Rosolowski, PhD*

0:02:00.3
Okay. But you’re listed as first author on this paper.

*Gerald P. Bodey Sr., MD*

0:02:03.7
I am?

*Tacey Ann Rosolowski, PhD*

0:02:04.4
You are.

*Gerald P. Bodey Sr., MD*

0:02:05.9
Well, I did a lot of the writing.

*Tacey Ann Rosolowski, PhD*

0:02:08.1
“Late Intensification Therapy for Acute Leukemia in Remission, Chemotherapy, and Immunotherapy.” The authors are Gerald Bodey, Emil J Freireich, Ed Gehan, Kenneth McCredie, Victorio Rodriguez, Jordan Gutterman, and Andrew Burgess.

*Gerald P. Bodey Sr., MD*

0:02:26.8
Well, that was et al., but I’m sure that Dr. Freireich gets the credit for it, not me. That was his idea. I just did some—a lot of the work. I don’t know. It’s amazing how much of that was stuff—the infection and prophylaxis stuff, it’s getting boring now. We did all sorts of stuff—comparing different kinds of soaps.

*Tacey Ann Rosolowski, PhD*

0:02:50.6
What was the soap that you studied that went on the market afterwards?

*Gerald P. Bodey Sr., MD*

0:02:58.0
I’m not sure I can even tell you that anymore.
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Tacey Ann Rosolowski, PhD
0:03:01.8
Was it one of those pHisoHex/pHisoderm things?

Gerald P. Bodey Sr., MD
0:03:04.5
No. I really don’t remember anymore what particular one it was.

Tacey Ann Rosolowski, PhD
0:03:16.5
So this was—all this work in the laminar airflow rooms was really groundbreaking in the sense that you were quantifying all kinds of stuff, just seeing what you could influence.

Gerald P. Bodey Sr., MD
0:03:27.9
Yes. We recognized—the oldest is the—well, this was done to try to learn as much as we could on how we could keep the patient from being exposed to possible infection. I didn’t realize this was all infection stuff, but here’s the one paper we did studying fungal infections. But I didn’t know if I really did—this is not a terribly informative paper.

Tacey Ann Rosolowski, PhD
0:04:34.5
Tell me, Dr. Bodey, I know you said last time that it was determined that given the expense of running and maintaining the protected environment and laminar airflow rooms that MD Anderson decided it wasn’t worth operating and that the benefits were not commensurate to the expense of running them. So what I’m wondering is with all this work that you did to quantify infections and how you could influence them, did you discover things that would be applicable outside of the airflow rooms?

Gerald P. Bodey Sr., MD
0:05:11.0
To a certain extent, yes, trying to maintain the level of contamination, things like that, but certainly not anything to level of the quantitative approaches. Some of the—I mean, some of the agents that we used, maybe the soaps or something, might have been used then in other patients, but there was quite a dramatic difference between being in those units and being out in the ward. I think that they actually had some impact on the air flow. They didn’t have laminar airflow, but they have filtered air in the rooms. The whole laminar airflow program was stopped after I retired or when I was at least pretty much retired, so I wasn’t really heavily involved in what went on after that.
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_Tacey Ann Rosolowski, PhD_

0:06:12.0
Now, I know you weren’t able to—

_Gerald P. Bodey Sr., MD_

0:06:15.4
Do you have a copy of this paper?

_Tacey Ann Rosolowski, PhD_

0:06:16.9
“Fever in Neutropenia, The Early Years,” I do not.

_Gerald P. Bodey Sr., MD_

0:06:25.3
It’s awfully long, twenty-one pages of published material. I don’t know how we can—it’s kind of long to make a copy of, unless you really want it badly. My copy machine is slow.

_Tacey Ann Rosolowski, PhD_

0:06:52.8
Slow, yeah. Well, the other thing I could do is take it with me and mail it back to you.

_Gerald P. Bodey Sr., MD_

0:06:57.4
Well then, if you’d like to do that, yeah.

_Tacey Ann Rosolowski, PhD_

0:06:59.1
Sure. That would be great. I will just make a note to copy and return.

_Gerald P. Bodey Sr., MD_

0:07:04.7
Now, I don’t know how much all—what else you’d like to have. I mean, this is—

_Tacey Ann Rosolowski, PhD_

0:07:08.9
Well, let me just make that note. I mean, I’d like to hear about—I know you don’t have papers in front of you, but I’d like to hear about the work that you have done. That doesn’t go with this? This is another thing? Okay.

**Gerald P. Bodey Sr., MD**  
0:07:31.2  
That belongs with another—

**Tacey Ann Rosolowski, PhD**  
0:07:32.9  
Some of your reasons for getting involved in the chemotherapy work and maybe the big themes of the research that you did in that area.

**Gerald P. Bodey Sr., MD**  
0:07:43.4  
Well, it all came about because—I think I mentioned to you the last time—one of my friends, Dr. Charles Mengel who went to Johns Hopkins, his father was our family physician. He talked me into applying for a position at the National Cancer Institute. That’s how I got started in it. Of course, then I was assigned to the leukemia service, so I was working under Dr. Freireich. And Dr. Freireich is a brilliant man. He just created an environment where we found things to do that interested us. So I had—and then I stayed on—well, I was there for three years. Then I just got interested in it. Then of course, our clinical responsibilities were the entire ward, taking care of these patients with acute leukemia. So that’s how I got in it all with acute leukemia. Actually, the infections were really kind of secondary to the primary, which was treating these patients for leukemia. I wasn’t really knowledgeable about antitumor agents and all that. That was Dr. Freireich’s responsibility—was to come up with the chemotherapy regimens. We just were giving them to the patients. We might be involved in the analysis of the results and that sort of thing, but they were his derivations, to a lesser extent, I guess, Dr. Frei too. But it was primarily him. He ran the leukemia service. We actually had two floors, one for children and one for adults.

**Tacey Ann Rosolowski, PhD**  
0:09:41.5  
And this was at the NIH?

**Gerald P. Bodey Sr., MD**  
0:09:42.7  
NIH—National Cancer Institute—yeah. So that’s how I got involved. I got involved in some of the chemotherapy work as well. I was analyzing data and that sort of thing.
Tacey Ann Rosolowski, PhD
0:10:03.1
So you served a support role. You were not pairing drugs or doing any of those kinds of things?

Gerald P. Bodey Sr., MD
0:10:12.7
No. That was his responsibility. When I came down here, I had more. But even here, he was always the over—oversight with acute leukemia and some other areas as well. I often worked very closely with him. I don’t know that I ever developed a chemotherapy regimen solely on my own. Maybe I did, but not very often. That was his doings. Then I would be involved in carrying them out and so forth.

Tacey Ann Rosolowski, PhD
0:10:51.8
Was there a particular—any particular study that stands out for you right now that you recall as being either particularly interesting to you or significant?

Gerald P. Bodey Sr., MD
0:11:07.7
Well, one of them was when he decided to develop a four-drug combination to treat acute leukemia. I mean, that was unheard of at that time. You usually were using only one. Some of us were somewhat skeptical about the wisdom of doing something like that, but it turned out to be very effective, and the remission rate was higher in those patients. The duration of remission was longer. So it was a major advance, actually.

Tacey Ann Rosolowski, PhD
0:11:39.5
How did the patient tolerate it?

Gerald P. Bodey Sr., MD
0:11:41.6
The drugs were selected on the basis of their activity but also their toxicities so that we didn’t have overlapping toxicities. As we used them, we got to learn what concentrations or doses they could tolerate.

Tacey Ann Rosolowski, PhD
0:12:06.8
Now, as you were treating patients, for example, on that study, you were also handling the infectious disease side of it as well?
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**Gerald P. Bodey Sr., MD**  
0:12:14.6  
Yes.

**Tacey Ann Rosolowski, PhD**  
0:12:16.7  
Were there some patients who were in two studies at once? I mean, how did you manage that?

**Gerald P. Bodey Sr., MD**  
0:12:23.8  
Well, there were a lot of patients who were on a chemotherapy regimen and also getting involved in an antibiotic study. That was very common, yeah.

**Tacey Ann Rosolowski, PhD**  
0:12:37.6  
Any other of the chemo studies that stand out in your mind?

**Gerald P. Bodey Sr., MD**  
0:12:42.3  
We did so many of them. I’d have to really think for—you know—to pick one out as opposed to another. But there were obviously advances. Adriamycin, I guess, is one drug that would stand out as being particularly effective. To be quite honest with you, I don’t know what they’re using right now.

**Tacey Ann Rosolowski, PhD**  
0:13:16.0  
Is there anything else that you’d like to say—more about the research that you’ve done?

**Gerald P. Bodey Sr., MD**  
0:13:28.9  
I don’t know.

**Tacey Ann Rosolowski, PhD**  
0:13:34.3  
When you look back at the research that you’ve done, what are you really pleased that you focused on, or what are you really proud to have accomplished?

**Gerald P. Bodey Sr., MD**
0:13:46.2
The thing I’m most pleased with was that I had the opportunity to work with Dr. Freireich all these years. I mean, we’re very good friends, and I have very high regard and respect for him. I was grateful to have the opportunity of working with him because we were making progresses and treating leukemia as well as infections. It was a real pleasure to work with him. See what I have here? I have all these papers, up to—I don’t know—800 and something, but it’s only the first page, not too much help.

_Tacey Ann Rosolowski, PhD_

0:14:32.8
That’s okay. I mean, I think we’ve hit the big themes, and certainly with a solid bibliography people can do supplementary research.

_Gerald P. Bodey Sr., MD_

0:14:45.1
Well, you’re welcome to take this along with you as long as you bring it back to me, because it’s the only one I have. It’s a pretty heavy book.

_Tacey Ann Rosolowski, PhD_

0:14:51.9
That’s okay. I think actually Javier gave me a list of abstracts. So they could be—I can find those on my end too.

_Gerald P. Bodey Sr., MD_

0:14:59.9
Oh, you can? Okay.
Tacey Ann Rosolowski, PhD
0:15:01.2
Yes, so thank you. I did want to ask you about a few other issues as we go on here. In 1981 and ’83, you were involved in setting up an Office of Research Protocol. You were also the first director for that office. I wondered if you could tell me about that.

Gerald P. Bodey Sr., MD
0:15:30.2
Not much. I don’t remember much about it. But there was an effort to have an organized activity in the institution.

Tacey Ann Rosolowski, PhD
0:15:43.2
Why was it felt that it was needed at that time in the early eighties?

Gerald P. Bodey Sr., MD
0:15:48.2
So people knew what was going on. So somebody didn’t go and decide to do some protocol and treat people with dog dirt or something or other.

Tacey Ann Rosolowski, PhD
0:15:55.6
Oh, right.

Gerald P. Bodey Sr., MD
0:15:57.2
You know, that certain rules and regulations were being followed. I mean, there are restrictions on what you can do with investigational drugs and so on. That’s how it got set up. I don’t remember whether or not there was some particular episode that somebody violated. I think that happened actually, but I don’t remember for sure. You know, you had to be sure that patients were giving their permission to do this study if you used investigational drugs, and the company supplying the drugs needed to know—the FDA or somebody at the NCI or whatever. So there was a certain amount of bureaucracy associated with all of this. They finally decided that they needed to have an office that supervised that. It wasn’t a big job, but I have just vague recollections that somebody did something they shouldn’t have done. That’s what really put it to the floor.

Tacey Ann Rosolowski, PhD
0:17:10.2
So how did you go about setting it up? What was involved with that?

Gerald P. Bodey Sr., MD
0:17:15.8
Not much, just having certain rules and regulations. If somebody had a new protocol, they had to submit it to us. I think we may have had a group that reviewed these things. It wasn’t just me. But they had to have permission before they could start doing a study.

Tacey Ann Rosolowski, PhD
0:17:32.9
And it’s kind of amazing that that was really new in the institution. How did people react to that sudden requirement?

Gerald P. Bodey Sr., MD
0:17:39.8
They didn’t have any choice. I don’t—I think most people didn’t mind. They recognized the importance of it. So I don’t think there was—I don’t remember that there was a lot of antagonism about it.

Tacey Ann Rosolowski, PhD
0:17:58.3
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I mean, it’s kind of surprising that there wasn’t any oversight before that. Was that something that was happening at institutions nationwide in the early eighties—that suddenly there were offices to regulate research?

_Gerald P. Bodey Sr., MD_  
0:18:13.2

I don’t remember if actually anything came out of the NCI or FDA or whatever, but it was not at all unusual for people to just be doing studies and not having any kind of major supervision until this sort of thing. Then, as I say, I don’t remember if it originated from the NCI or not, but eventually, through NCI, it became necessary for everybody, basically. Then of course, hospitals themselves—institutions wanted to have certain—be sure that certain things were being done so you weren’t going out and doing something that was immoral or whatever.

_Tacey Ann Rosolowski, PhD_  
0:18:59.3

It’s kind of incredible now, from the vantage point of today, to think there was a time when there wasn’t oversight, because there is so much of it now.

_Gerald P. Bodey Sr., MD_  
0:19:07.7

Well there wasn’t anywhere near as much in the way of research being done with new drugs and that sort of thing back in those days.

_Tacey Ann Rosolowski, PhD_  
0:19:15.4

Right. I suppose that’s certainly true. That’s certainly true. Another role that you served was as chair of the Department of Medical Specialties. And I wondered if you could tell me about what that involved.

_Gerald P. Bodey Sr., MD_  
0:19:31.3

When was that?

_Tacey Ann Rosolowski, PhD_  
0:19:33.1

It was 1987 to 1995.
Medical Specialties was everybody except the cancer specialists. So we had—and medical doctors, not surgeons. So we had some endocrinologists and pulmonary specialists and people like that that were available to take care of complications and that sort of thing. Medical Specialties was these other specialties of medicine that we had to have people take care of—cardiologists, things like that. It wasn’t a big-time endeavor at that time. Now it’s much larger than it was then.

Okay, so here were the—let’s see, these were the specialties that were included: pulmonary medicine, cardiology, infectious diseases, dermatology, nephrology, and general internal medicine. Now, what was going on before the creation of this department?

There wasn’t any kind of an organized structure to it. The cardiologists—there was one of them, and pulmonologists and so on. Actually, cardiology and pulmonary were combined, initially. I separated them. But there was less oversight as to what was being done. And also by having this, we were able to try to strengthen these areas to have enough personnel to provide proper services and make sure that the proper services were being provided and that sort of thing. You know, if you have a unit where everybody is focusing on taking care of cancer, some of these other things may not be addressed as well as they could be. So somebody—but once we had this set up—and actually most of these areas were already in existence, it was just that they were combined and put under my supervision. But by having these people, and if somebody developed kidney failure, you had somebody to take charge and see that that was addressed. So it really wasn’t anything terribly dramatic, but it was something that was needed in order to be providing the maximum care to the patients and not just focus on their cancer, because many of these patients then developed other side effects. Some of the drugs had side effects that needed to be paid attention to and so on.

Now did any research—was there any research done in that department?
Yes, but not a great deal.

_Tacey Ann Rosolowski, PhD_
0:22:38.3
What kinds of questions would they have looked at?

_Gerald P. Bodey Sr., MD_
0:22:42.2
That's a long time ago.

_Tacey Ann Rosolowski, PhD_
0:22:43.7
I was just sort of wondering, like a general theme.

_Gerald P. Bodey Sr., MD_
0:22:46.5
I don't know. I really don't know how much was done. Most of it was really a service oriented—so it wasn't quite like the chemotherapy programs where research was an integral part of the department. In these cases, most of what they were doing was providing necessary services and not really doing research. Now, I'm not saying that nobody did any research, but there wasn't a great deal. I think perhaps maybe the department that did the most of it was Endocrinology.

_Tacey Ann Rosolowski, PhD_
0:23:22.1
I hadn't read that. So Endocrinology was also part of this?

_Gerald P. Bodey Sr., MD_
0:23:25.7
Yes.

_Tacey Ann Rosolowski, PhD_
0:23:27.8
Interesting. When you took on—solidified this and took on the role, what were your long-term goals for the department? And did you feel like you had achieved them?

_Gerald P. Bodey Sr., MD_
0:23:45.0
The long-term goals were to make—to expand the department and provide other services in addition to the ones we were. Some of the services were actually provided from the medical school and not within MD Anderson itself. So my long-range objective was to make these departments independent and strong and well provided and providing good service and also, where possible, doing some research. Now, I didn’t accomplish a great deal of that because they didn’t give me the resources to do it, but that was the long-range goal.

_Tacey Ann Rosolowski, PhD_

0:24:27.3
Why do you think the resources weren’t available for that?

_Gerald P. Bodey Sr., MD_

0:24:29.8
Because it’s a cancer hospital, so not everything, but most everything, was focused on cancer. You know, you had all kinds of people involved. You had radiologists, surgeons, internists that were doing cancer—pediatricians. They were the ones that got top priority, and that’s the way it should be. But we were hoping to get enough support that we could strengthen these, never really intending that they were going to be competitive with cancer but that we were providing good service, and also the possibility of maybe doing some research in conjunction with that.
I also wanted to ask you about the leaders that you worked with over the course of your career. And I wondered if you could talk to me about the various MD Anderson presidents, to the degree that you worked with them.

Gerald P. Bodey Sr., MD
0:25:33.9
I didn’t really have much interaction with them. Dr. Clark, I did. He was a remarkable man. He was—how would I want to describe him? No fooling around. I mean, he was sort of like the general of the army. If he said something was going to be done, it was going to be done. I can remember we had initial discussions about the medical—heads of the departments committee meeting about whether or not we were going to put in a laminar air filter room. There was a lot of talk back and forth and if this wasn’t such a good idea and so on. Finally, he had enough on it. He said, “Okay, we’re going to do it.” That was it, end of discussion. But I—when I first came I was scared of him. But as I got to know him over the years, I had a high regard for him. He was a very wise man. He basically started MD Anderson and recruited some of his old cronies from the army and that sort of thing, initially. He was a very wise man, and he did a good job. As I say, I was scared of him in the beginning, but after I got to know him, I had a great deal of respect for him, and we had a good relationship.

Now, Dr. [Charles] LeMaistre, I guess, came after him. Dr. LeMaistre was a fine Christian gentleman. We went to the same church. He was a very, very fine man. Well, I don’t know. I have to be careful because I wasn’t in the inner circle at the top. He was just trying to do what was right. He was completely different from Dr. Clark, but a fine man. Nobody always did everything right. He tried to do well, and I think he put on a good image for the institution. He
was a very dignified and cultured person and so on. Sometimes some of his selections of lesser individuals in the institution were not the way I would have chosen, but I’d say overall he did a reasonable job. I last saw him about two years ago. He’s still going strong. He lost his first wife and remarried. He was interested in cigarette smoking and cancer. He did a lot of work in that field. As I say, he was very different from Dr. Clark. I think he did a reasonably good job, overall.

Dr. [John] Mendelsohn came right around the time I sort of was slowing down and semi-retired, so I really didn’t have many interactions with him. He obviously did a lot of good for the institution, and it has expanded tremendously. Sometimes I think too much, but now we’re in the newspaper every week for doing something dishonest. I don’t’ know. I probably shouldn’t say this. Do you have this on?

Tacey Ann Rosolowski, PhD
0:29:32.9
It is on. Would you like me to turn it off?

Gerald P. Bodey Sr., MD
0:29:34.9
Yes.

0:29:36.4 (End of Audio 5 Session 2)

Tacey Ann Rosolowski, PhD
0:00:00.6
I think we’ll turn it on for this. You said part of the problem is how big do you want to be?

Gerald P. Bodey Sr., MD
0:00:05.3
Yes, how big do you want to be? I think you want to have some idea as to where the fence is going to be, and we’re not going beyond this. And if we are going to expand and we’re going to have the resources and the area to have the facility and so on, is it going to fit in well with what our objectives are and so on? Just getting bigger isn’t necessarily better. I don’t know what the limit is, but there is a limit. When you exceed that, then you begin having problems. I think Anderson may well have exceeded that at this point. I mean, it’s just incredible how the building extended under Dr. Mendelsohn, just incredible.

Tacey Ann Rosolowski, PhD
0:00:58.5
Interview Session: 02
Interview Date: June 26, 2013

Well, I was going to ask you if you had observed any changes to the culture of MD Anderson, to patient care, any of that, with all of the expansion, because it has to create a change.

Gerald P. Bodey Sr., MD
0:01:11.0
I’m not in a position to say anything about patient care. I wasn’t heavily involved at that point. But the one thing you do notice is the intimacy of the staff. There’s no—you can know pretty well thirty or forty people. Three hundred, you aren’t going to know. I saw an obituary in the newspaper a couple of days ago of somebody who worked at MD Anderson that I’d never heard of. So I think that it depends on what it is you want to accomplish. I’m not sure that—well, I’m not being totally fair, because there’s been an incredible explosion of knowledge in recent years. So are you going to follow all of it, or are you going to be selective? And the same applies to patient care. You know, if you have too many doctors involved, they don’t get to know each other very well, and things might—the one who’s in charge may not know very well some of the people working for him and how they’re doing and so on. I don’t know what the magic numbers are, but I do know that there is a limit to how large you can get and still provide the services at the excellent level that you have been. So I think as far as Anderson is concerned, with my perspective, they’ve kind of gone beyond that. But I’m not an expert in that area.

Tacey Ann Rosolowski, PhD
0:03:00.5
I was wondering if you wanted to comment at all on education. To what degree were you involved in education in your department? You said you had—

Gerald P. Bodey Sr., MD
0:03:09.6
We had conferences on a regular basis, and of course, I always attended them. Sometimes I presented something, but there were a variety of people. Some of them were just discussion sessions or presenting patients and discussing and that sort of thing, but I was always in attendance at those sorts of things. They were quite educational. Of course, Dr. Freireich attended and so on. They were informational to the staff. Also, the staff interacted, so you got to—you knew all the other staff members. That was possible because the department wasn’t huge when I was there. As they get larger, the intimacy between people is diminished. But again, it’s not appropriate for me to be commenting about what it’s like now because I haven’t been involved at the clinical level for, I guess, it must be eight years or something like that.

Tacey Ann Rosolowski, PhD
0:04:21.4
Right. Yeah, and things changed really fast at the institution.
Gerald P. Bodey Sr., MD
0:04:27.9
Things—in the beginning it was very easy. If I wanted to do more antibiotic studies, I had to write a protocol, have it reviewed, and initially just approved by Dr. Freireich. Later on we had a committee that examined protocols for the institution. You had to get approval, but it was still pretty simple to get something going if it was legitimate. Now it’s much more complicated.
Chapter 10
A: Personal Background
A Christian; Grateful to Work at MD Anderson

Story Codes
A: Faith
A: Personal Background
D: Ethics
A: Professional Values, Ethics, Purpose
D: On Pharmaceutical Companies and Industry
C: Dedication to MD Anderson, to Patients, to Faculty/Staff

Tacey Ann Rosolowski, PhD
0:04:51.5
A lot more layers of bureaucracy involved, absolutely. Is there anything that I haven’t asked you that you would like to talk about? Because you’ve done so many things in so many areas, I just want to make sure that I haven’t missed something in preparing from your background.

Gerald P. Bodey Sr., MD
0:05:16.0
Well yes, there is one thing that’s important. I am a conservative Christian, and that impacts what I do and how I think and so on, and it’s very, very important to me.

Tacey Ann Rosolowski, PhD
0:05:31.4
How is that important to you? How has that had an impact on what you do and how you think?

Gerald P. Bodey Sr., MD
0:05:35.7
Well, that I am honest and trustworthy, and that I try not to do anything that would be inappropriate for a Christian to do. There were times when I would talk to some of my colleagues or even occasionally a patient about their religious faith and so on, so I would hope that people who worked with me knew I was a Christian. I’m not necessarily sure that they all did, but I hope that they did.

Tacey Ann Rosolowski, PhD
0:06:10.9
So that was a strong element to your research values, your sense of integrity, all of that kind of thing? Do you make a connection there as well?

**Gerald P. Bodey Sr., MD**  
*0:06:25.6*

Absolutely. I mean, when I did protocols, they were done correctly. There were no falsifications or fabrications or anything like that. It was what it was. And I tried to always be honest and forthright about what I was doing. And the same sway, I did a fair amount of lecturing over the years, literally around the world, and I was always careful that what I said was true. Now, the pharmaceutical industry has taking a beating about this kind of thing, and doctors. Nowadays, if you write a paper, the first whole page is about how you don’t have any relation to this, that, and this is what I do have and so on. Things were much looser in my days. Drug reps could come in and see the doctors and so on. I can understand how things have gotten tighter. But that was in part due to the fact that there were some doctors who were not functioning properly.

I always—when I did a study, I wrote the protocol and had it reviewed, and we followed the protocol and reported it as it was. And if the study—there weren’t many occasions where the studies didn’t turn out well because I wouldn’t have picked the drug in the first place. But it has gotten out of hand now. Back in the days when I did it, the honorary—they paid a lot lower than what they paid now. I never—I think maybe once or twice, in all of the years that I gave lectures, a drug rep tried to get me to say something. I was always free to say whatever I said. Now, obviously I was saying something that was advantageous to the drug company, because if it wasn’t, they wouldn’t have asked me to come and speak. So there was that kind of effect. But when I gave a talk, I was giving a talk to educate people about diseases and the therapy. Of course, I said something about the new drug that was available, but I presented the data that we had as it was. If it wasn’t good, they weren’t asking me to give a talk. There was a certain amount of selectivity. I will confess, I was at a symposium where I heard other doctors that said things that were totally inappropriate, but I tried to be straightforward and present the data as it was. I didn’t get up and say, “Now you really need to use this antibiotic,” but, “Here is what this antibiotic has accomplished in our experience.”

So it was somewhat loose in those days. It probably did need to be tightened up a bit. I think they’ve gone overboard at this point now. I did run into a couple doctors who made huge amounts of money by playing up the drug company. I mean, I got paid when I gave a lecture, but it was a set honorarium and that was it. And I appreciated the opportunity to do it. I felt I was doing a real service. As I said, if a drug was no good, they weren’t going to ask me to talk about it. So obviously there was a certain level of selectivity, because I was only talking about those that were really effective, like carbenicillin. That was a dramatic change in the treatment of *Pseudomonas* infections. Some of them were more important than others. I felt I was doing
something useful because I was making doctors aware of these drugs and how to use them and so on.

I think I told you about my experience with carbenicillin and how they shipped them from England in big vats and all. That was the first drug I worked with, and it was straightforward. It was a major advance in treating \textit{Pseudomonas} infection—a really major advance.

\textit{Tacey Ann Rosolowski, PhD}  
0:10:57.2  
Is there anything else that I have neglected to ask you that you would like to be asked?

\textit{Gerald P. Bodey Sr., MD}  
0:11:03.0  
Not really. I’ve talked about everything. I didn’t fall asleep in the office.

\textit{Tacey Ann Rosolowski, PhD}  
0:11:11.3  
Well, there is one last question I’d like to ask, which is—you said the last time that I was here that you had been lecturing, but you were about to close the Anderson, you gave your last lecture. I’m wondering what you’re planning on doing now that you are well and truly retired?

\textit{Gerald P. Bodey Sr., MD}  
0:11:25.2  
[Redacted.] So I’m still not quite back to snuff yet. But I do intend to do something. I’m not sure just exactly what. More likely something related to the church than to medicine, because medicine has advanced so rapidly now that I’m really an old-timer. I’m behind the times, so I wouldn’t think that I have very much to offer anymore. I certainly am not going to take care of patients. I already gave up my medical license last year, so I’m not doing anything like that. I am kind of—I’m uncertain at the moment just what it is, but I do want to do something other than just sit around the house. But I’m not quite sure what it will be yet.

\textit{Tacey Ann Rosolowski, PhD}  
0:13:03.1  
So you’re looking at an array of choices, which can be a nice thing.

\textit{Gerald P. Bodey Sr., MD}  
0:13:08.6  
Yes, I want to do something. I’m not going to write any more papers. I’m all written out.
Interview Session: 02
Interview Date: June 26, 2013

*Tacey Ann Rosolowski, PhD*

0:13:18.2
Is there anything else you’d like to add at this point?

*Gerald P. Bodey Sr., MD*

0:13:21.0
No, I really can’t think of anything except that I’ve been very grateful that I had the opportunity of working at MD Anderson and all that I was able to do there and with the associates that I had, especially Dr. Freireich. That’s about it. There are many, many people who work there at MD Anderson who I was associated with and who I have very high regard for—very, very, very few people that I ran into there that were not top notch, honorable, decent people trying to do their best. It’s a great institution.

*Tacey Ann Rosolowski, PhD*

0:14:09.5
Thank you very much, Dr. Bodey. I really appreciate you taking the time to talk to me.

*Gerald P. Bodey Sr., MD*

0:14:13.5
I appreciate the opportunity to do it. I hope I didn’t bore you too much.

*Tacey Ann Rosolowski, PhD*

Not at all. I’m turning off the recorder at 3:10.

0:14:23.5 (End of Audio Session 2)
Chapter 00C
Interview Identifier

*Tacey Ann Rosolowski, PhD*
0:00:00.8
All right, we’re ready. Let me just start it. Okay. So we’re recording, and this is Tacey Ann Rosolowski. Today is July 23, 2013, and the time is about 1:12. I am in the home of Dr. Gerald Bodey up in The Woodlands, north of Houston, and this is our third interview session together. Thank you, Dr. Bodey, for going through your records and selecting some things that you felt would be good to add to the oral history.

*Gerald P. Bodey Sr., MD*
0:00:36.1
It’s my pleasure. I hope what I have to say is of some value.

*Tacey Ann Rosolowski, PhD*
0:00:40.0
So please, yes, just go through what you discovered.
Chapter 11
A: The Researcher

Early Experiences and MD Anderson

Story Codes
A: The Researcher
B: MD Anderson History
B: Building/Transforming the Institution
B: Multi-disciplinary Approaches
B: Growth and/or Change
B: MD Anderson Impact
C: Discovery and Success

Gerald P. Bodey Sr., MD
0:00:44.8
Well, Dr. Frei and Dr. Freireich came down here to MD Anderson, and they played a very important part in establishing chemotherapy studies and so on at MD Anderson—not that there weren’t any being done before, but it was done on a much larger scale and better organized and so on.

Tacey Ann Rosolowski, PhD
0:01:08.0
Is that really what was unique about what they did—the scale and the organization?

Gerald P. Bodey Sr., MD
0:01:13.7
Well, and also the contributions of some studies themselves—the drug combinations and so on. But it was all focused on cancer chemotherapy. Now, there was one other element, which I think I played a major role in, and that was in the studies of infections in cancer patients. Not that there weren’t other people who had done some of that before I came, but I had a major interest in this that I had developed when I was at the National Cancer Institute.

Tacey Ann Rosolowski, PhD
0:01:46.7
Could you just for a second—could you tell me what people had already done and then how you pushed things forward?
Gerald P. Bodey Sr., MD
0:01:55.5
I don’t know that there was much in the way of organized studies of infections in cancer patients before I came. There were people who were doing—who had access to some experimental agents, but they weren’t doing studies on a larger scale, as we were able to do. My first office at MD Anderson was in a temporary building. At that time they were in the process of building an addition, primarily for laboratories in the back of the original MD Anderson structure. But I was in this temporary building for several years. Then finally I got to move over. Then what happened was that they decided to have a satellite unit at the old Center Pavilion, which was an apartment house diagonally across the street from MD Anderson. Then I was assigned to be the head of the hospital program, which were all patients from our department, so I moved over there. Then I had some nice office space, but I was distanced from MD Anderson. We had about a twenty- or thirty-bed unit at this Center Pavilion.

Tacey Ann Rosolowski, PhD
0:03:28.6
And this was just for chemo patients with leukemia?

Gerald P. Bodey Sr., MD
0:03:30.2
This was for chemo and leukemia—well, not just leukemia, but patients receiving chemotherapy. Now, one of the private practice physician groups had already established one floor of the unit before we came. We had nothing to do with them. They were just a separate unit, but they were the first to establish any medical facility there in the Center Pavilion.

Tacey Ann Rosolowski, PhD
0:03:57.4
I didn’t realize that there were actually private practice physicians who were part of that.

Gerald P. Bodey Sr., MD
0:04:03.1
They weren’t part of MD Anderson. They did it on their own.

Tacey Ann Rosolowski, PhD
0:04:06.3
Right, but they shared space.
They were their own group of physicians. They moved in there from—and I had a small laboratory there as well. I actually—when I got to Center Pavilion, then I had more laboratory space and more people working for me and so on. I might start by talking about a couple of experiences that I had in the early days of my stay here at MD Anderson. There are scientific societies that have a yearly meeting to discuss cancer and one—primarily a laboratory—and AACR and then another, ASCO, which is primarily clinical. Dr. Freireich, of course, encouraged us to make presentations, and he got me to submit an abstract. It was accepted at their meeting in San Francisco. I don’t know what year, but the late 1960s, I guess. And what he had taught us was that if you’re making a very formal presentation like that, you ought to write everything down like, “As you can see on the next slide—” So I did that and wrote everything down. I went to the meeting, and there were several speakers before me. Then they announced that I was the next speaker, and I got up. I may have said a sentence or two, then I asked for my first slide, and nothing happened. I said, “May I please have my first slide?” Still nothing happened. So the third time around the projectionist responded, and he said, “We don’t have any slides for you.” Well, if I hadn’t followed Dr. Freireich’s advice to write everything out, I would have been totally devastated. I was almost that anyway, but I gave my talk, and that was on a Friday. The next Monday—

And you never found your slides?

The next Monday I was at my office, and I got a phone call from the guy who had been there before me, wanting to know if I had his slides. What he had done was when he was done, he walked past the projectionists table, took a batch of slides that he thought were his, and instead he was taking mine. And he didn’t have the courtesy enough to apologize or anything. He had my slides, and all he was concerned about was whether I had his.
Yeah, I got my slides back. But as I say, if I hadn’t done what Dr. Freireich had suggested, I would have been totally devastated, because I had never given a formal talk like that before. I had another interesting experience at the Infectious Disease Society meeting. I was working with, what was then a new antibiotic, carbenicillin, and having pretty good results. But we were having some infections caused by an organism known as *Serratia*, and carbenicillin wasn’t working very well. They had a speaker from Canada there who made a presentation at the meeting, and he was talking about carbenicillin also. Then he made the statement that one of the organisms that was particularly susceptible to carbenicillin was *Serratia*. So we had a little subgroup after the meeting was over of experts in the field talking together. He was talking again about how carbenicillin was a real find for treating these difficult infections. So I piped up, and I said, “We’ve been using carbenicillin as well. It is a very good drug, but only about 20% of our *Serratia* infections have responded to carbenicillin. We don’t find that it’s a useful antibiotic.” So this guy says, “Well, what kind of patients are you treating?” I said, “Well, they’re cancer patients.” He said, “Well, they all die anyway.” So those were the kinds of things that you had to begin to get a pretty thick skin when you’re going around. I was young, and you’re a guy getting dumped on here and there.

But that’s kind of a telling story though about the attitude and how, in a sense, primitive cancer treatment was at the time. I mean, it was rare at the time for patients to survive.
Well, it was. And that was one of my early interests was in treating infections in cancer patients. One of the first drugs that became available at that time that looked promising was an aminoglycoside antibiotic called gentamicin. People were enthusiastic about this drug, because it had a broader spectrum of activity than the other aminoglycosides and other antibiotics. It was a pretty special incorporation. It looked like it was going to be a very useful drug. We did some
studies with it also, but what we found, to our dismay, was that it really wasn’t very effective in people who were neutropenic. If they didn’t have neutrophils, they didn’t respond. And if they did, then yes, it had a much better spectrum of activity than the existing antibiotics at that time.

But we then—another antibiotic became available known as carbenicillin, which was a penicillin. It was produced by Beecham Laboratories in England. I was able to contact their medical director here in the United States and interest him in doing studies in our leukemic patients. Well, the daily dose of carbenicillin was thirty grams. That’s a lot of drug. And it was supplied in one-gram vials. So we would get big barrels of this drug shipped to us from England, filled with carbenicillin. As we went along and were using more and more of this drug, we ended up at one point having one nurse who was coming in and all she was doing was mixing carbenicillin all day to give to the patients. But it really was a major improvement, particularly in Pseudomonas infections. At that point in time, Pseudomonas was becoming a major problem in our neutropenic patients. I mean, if they got that, they were going to die, because the only other antibiotic that had activity was gentamicin, and it didn’t work if you didn’t have any neutrophils. The carbenicillin did, and it really made a huge difference.

Tacey Ann Rosolowski, PhD
0:11:51.3
Can I ask you, Dr. Bodey, how did you discover these different drugs? Were you always on the lookout for what was new?

Gerald P. Bodey Sr., MD
0:12:03.2
After I had started doing the studies with several different drugs, the people at the company would usually be calling me saying, “We’ve got this new drug.” Sometimes it worked the other way around, where I heard they had a new drug and all. But I had an extensive relationship with a whole host of drug companies that were making new antibiotics. We were able, because of the nature of our patient population, to accumulate fairly large numbers of patients for these new drugs, so I generally didn’t have any problem getting involved with new studies.

For example, with the carbenicillin, in our first study of Pseudomonas infections we had a 91% cure rate with carbenicillin. The whole death rate from Pseudomonas fell from 31% to 8% with carbenicillin, so it had a very dramatic impact on Pseudomonas infection. Now, it didn’t work against some other organisms, but it was very effective in treating Pseudomonas. So then we began looking at antibiotic combinations. We looked at carbenicillin plus gentamicin—that was one of the studies that we did. Actually, before carbenicillin became available, the only
antibiotics that had any activity against *Pseudomonas* were colistin, polymyxin, and gentamicin, and they were basically ineffective if the patient didn’t have any neutrophils. So this really made a big improvement for our leukemic population. And having these patients that would get *Pseudomonas* infections, we now finally had an antibiotic we could use and treat them effectively. So it really did make a big difference.

*Tacey Ann Rosolowski, PhD*

0:14:09.3
Now, during this period, in the sixties and in the seventies and into the eighties, was there unusually—an unusually active period of drug companies producing new antibiotics? Did it help that you were doing research? Did that stimulate interest on the part of the drug companies to develop new drugs?

*Gerald P. Bodey Sr., MD*

0:14:30.1
No. I wouldn’t—I don’t think that had any role. It was just that that was an area of interest on the part of the pharmaceutical industry. And coming up with some of these new drugs and being able to do studies—some of them turned out to be very effective, and they made tons of money out of them. Some of them, unfortunately, didn’t. But most of them really did have some niche where they were beneficial.

*Tacey Ann Rosolowski, PhD*

0:15:01.5
I guess I was wondering if the drug companies discovered—for example, there was that drug that was not effective with neutropenic patients. Did that suddenly clue them in to the fact that, “Oh, here’s a need. Now we’ll try to create a drug that fills that need.”

*Gerald P. Bodey Sr., MD*

0:15:17.1
No, they just—I think it’s fair to say that in general they focused their attention on where their drug was effective.

*Tacey Ann Rosolowski, PhD*

0:15:24.7
I see.
Gerald P. Bodey Sr., MD
0:15:26.0
And finding a new drug isn’t exactly an easy thing to do. Sometimes it was just serendipitous. Sometimes they got them, and sometimes they had a study where they were trying to evaluate or modify an existing antibiotic and those kinds of things, although it worked sort of both ways. But over the years, we had the opportunity to study quite a few antibiotics. Some of them really made major differences, and carbenicillin was one of those. We also did a big study on looking at the relationship between the circulating neutrophil counts and infection in patients with acute leukemia. We studied 52 patients for 17,743 days, so it was a big. We looked then at the percent of these with infection related to their granulocyte count—the neutrophil count. What we found was that out of the total population where the neutrophil count was less than 100, there were 43 episodes per 1000 days. However, if it was greater than one thousand, there were five episodes per one thousand days. But it was higher if they were in relapse of their cancer than if they were in remission. So we were doing those kinds of studies in addition to cancer chemotherapy. There were several institutions around the country and around the world that had focuses on infection and cancer patients, but we were amongst the largest, and I think we did probably more studies than any other institution.

Tacey Ann Rosolowski, PhD
0:17:25.1
What was the significance of the study that you just mentioned? Why was that paper so important in particular?

Gerald P. Bodey Sr., MD
0:17:32.6
Because it identified what the patient’s risk was of getting an infection. Sometimes that even had some impact on the intensity of the chemotherapy. You didn’t want to give too much and have a long period of no neutrophils and the patient then getting infected.

Tacey Ann Rosolowski, PhD
0:17:59.3
Why was MD Anderson able to do these studies in a particularly broad and well-resourced way, do you think?
Interview Session: 03
Interview Date: July 23, 2013

Gerald P. Bodey Sr., MD
0:18:11.0
We had a fairly large population of those patients, and it was well organized, because—particularly leukemic patients, because they were under Dr. Freireich’s department. But even with the solid tumor patients, most of the new adjuvant chemotherapy that was being done was being done in our Department of Developmental Therapeutics of which Dr. Frei and Dr. Freireich were in charge. So I think that was the major factor. Things were pretty well organized.

Tacey Ann Rosolowski, PhD
0:18:51.8
I was curious; some people—some interview subjects—who have reflected back on this period when Developmental Therapeutics had first been established and when it was in its early years—they said that some of the studies that were being done in Developmental Therapeutics were kind of controversial. Was the work that you were doing with the infectious diseases controversial in any way?

Gerald P. Bodey Sr., MD
0:19:18.4
No, I wouldn’t think so. I’m not sure what they meant by being controversial.

Tacey Ann Rosolowski, PhD
0:19:25.0
Well, I think that—at least with the chemo studies—I think there were some questions about the dosage levels that were being given or the way that they felt maybe patients were being experimented on in unusual ways.

Gerald P. Bodey Sr., MD
0:19:37.4
Sure. I mean, the people were experimented on, because if you had nothing to offer—if you knew that the only other things they had to offer weren’t going to be any good, then why not use this new drug? Yes, that was a major part of the Department of Developmental Therapeutics was developing new drugs. They made a very important contribution to the advancement of chemotherapy of cancer. And you can’t do that unless you’re starting with new drugs. You have to start somewhere. So what else were you going to do? I mean, they weren’t doing it without any background information. There had been prior in vitro studies with cells. There had been prior animal studies and that sort of thing. So it wasn’t that they just got a bowl out of the blue and started giving something to patients. They did it, and they did it in a well-organized fashion.
They would have a protocol and the protocol was followed, dosages were the same for all patients in escalations and so no—not one patient getting one thing, somebody getting something else. So yes, it was investigational. A lot of things were—but you have to start somewhere. I mean, you don’t know whether a drug is going to do any good or whether it’s going to have serious toxicities until you start using it. But I think that everything was done in a very orderly fashion with protocol, not some haphazard “let’s give this guy so and so.” It was well done, and people were watching over things carefully and analyzing the data and so on.

I know that there were people at MD Anderson who didn’t like the Department of Developmental Therapeutics and had some unkind things to say about them. But my own view—of course, I was part of that department—was that things were done in a very orderly fashion and with as much knowledge as was available, but you have to start somewhere. There were a lot of advances that were made as a consequence of the work that was done in cancer chemotherapy. Now, I was part of the chemotherapy as well as the infectious diseases, so obviously I have a little bit of a bias. But I can’t think of any things that were don’t that were just casual or careless or whatever. They were well thought out and followed carefully and so on. There were times when a drug was used that turned out to be toxic or something, so we stopped using it as soon as we knew that, but you aren’t ever going to know until you use it. I think that’s a little inappropriate. I’m not—now maybe they know something that I’ve forgotten, but I don’t remember any careless chemotherapy being done. Some things would be considered by more cautious people as being a little too experimental or something, but we did make some major contributions to cancer chemotherapy that are still being used today.

_Tacey Ann Rosolowski, PhD_

0:23:06.9

Absolutely. I mean, I get a sense that there was almost a philosophical difference on how much risk you take.

_Gerald P. Bodey Sr., MD_

0:23:13.1

Let’s see. Well, I have a lot of information about the relationship between infection and neutrophil counts and so on, but that was well established.

_Tacey Ann Rosolowski, PhD_

0:23:46.3

Is there something that you’d like to share about that?
Interview Session: 03  
Interview Date: July 23, 2013

_Gerald P. Bodey Sr., MD_

0:23:48.0  
I’ll give you all this when I’m done. What was important was that we learned from these experiences and then we developed antibiotic regimens that were really beneficial. As I pointed out already with _Pseudomonas_, if you had a neutrophil count of 100 and you got a _Pseudomonas_ bacteremia, you were going to die. I mean, chances of recovering were almost zero until carbenicillin came along, and the carbenicillin and gentamicin combination—a substantial number of those patients survived their infections. And of course, we also were using white cell transfusions. I’m sure somebody talked to you about them. I’m not going to get into that, but that was an important component as well. If you want to turn it off just a second, I may look through here.

_Tacey Ann Rosolowski, PhD_

0:24:47.4  
Sure, just pause this.

0:24:48.7 (End of Audio 1 Session 3)
Chapter 13
A: The Researcher

Contributing to Advances in Treatments for Leukemia Patients: Drug Studies and the Laminar Air Flow Units

Story Codes
A: The Researcher
D: The History of Health Care, Patient Care
C: Professional Practice
C: The Professional at Work
A: Overview
A: Definitions, Explanations, Translations
C: Patients
C: Patients, Treatment, Survivors
C: Discovery and Success
D: Understanding Cancer, the History of Science, Cancer Research
D: Understanding Cancer, the History of Science, Cancer Research
C: Giving Recognition
C: Healing, Hope, and the Promise of Research
B: MD Anderson History

Tacey Ann Rosolowski, PhD
0:00:00.2
Shall I turn it back on?

Gerald P. Bodey Sr., MD
0:00:01.2

Yes, you can turn it on. One other important thing was that—and in the days when I first began getting involved in infections in cancer patients, a typical approach for an oncologist was that they would only start antibiotics after they knew what was causing the infection. One of the important advances was to start giving the patients antibiotics. I mean, you collected all your specimens and all to find out what was going on, but you didn’t wait until the results came before you started the antibiotics. This made a difference because if you waited until you had your results, some of those people already died, and they might have lived if you had started them on antibiotics right at the start of their fever.

Tacey Ann Rosolowski, PhD
0:00:53.9
Why did they do that? Why did oncologists do that?

Gerald P. Bodey Sr., MD
0:00:56.5
That was not just oncologists; that was Infectious Diseases too. I don’t know if I should tell this story or not. I won’t tell you where it happened. But the chairman of the Department of Medicine at one of the prominent medical schools was also an infectious disease expert. He would come around and make rounds with his medical staff, which consisted of a physician in charge plus the interns and residents and so on, medical students and all. He would come around to each ward a couple of times, once a week or something like that. Well, there was a woman that came into this one service with abdominal pain and fever. They worked her up, and they didn’t know what was going on. They started her on an antibiotic, and she became afebrile.

Tacey Ann Rosolowski, PhD
0:02:02.6
What does that mean?

Gerald P. Bodey Sr., MD
0:02:03.5
The fever went away.

Tacey Ann Rosolowski, PhD
0:02:04.8
Okay.

Gerald P. Bodey Sr., MD
0:02:05.4
Within twenty-four hours, and in that twenty-four-hour period, the chairman came around on his rounds and they presented this case to him. He insisted that they stop the antibiotics until they had the results of the cultures, even though this woman had clearly responded. She died, and she would have lived if she had stayed on those antibiotics. So that was the general environment in infectious diseases when I first went to medical school—that you just didn’t treat people with antibiotics until you knew what it was that you were dealing with.

Now, the other thing—we’ve already discussed pretty much the laminar air rooms and protected environment units and all that. Just a little addition there—the first life island was started at the
National Cancer Institute. Unfortunately, I forget the name of the man who developed them. But they had two units there, and it happened to be at a time when I was no longer at the NCI. I had gone back to my residency training. But when I came to MD Anderson, they had now gotten two of these life islands there, and I became responsible for those. Then someone from the National Cancer Institute came to me one day when I was attending a meeting there and asked me if I was interested in evaluating a laminar airflow room. We talked about it a bit, and I said, “Yes.” So we were the first people to have laminar airflow rooms. It was a little difficult talking the administration into putting these in, because you had two laminar airflow beds, whereas regular beds, we had three. So we were losing some income over that. But we started there, and then we moved over to the other building. We did that in part because they had developed portable laminar airflow rooms. We had five or six of them in the Center Pavilion unit.

Tacey Ann Rosolowski, PhD
0:04:53.1
Now, was it the NCI that was responsible for developing the portable ones?

Gerald P. Bodey Sr., MD
0:04:57.2
No. It was some private person who actually did it. But they were supporting it. There were—we were not the only ones that were doing it, but we had the largest unit for a while there at the Center Pavilion. It was an interesting experience.

Tacey Ann Rosolowski, PhD
0:05:27.4
Last time you gave me some pictures of it.

Gerald P. Bodey Sr., MD
0:05:34.2
I should mention—I don’t think I told you this the first time around, but when I first got back to MD Anderson and we had just these two life islands, we had a man—I would say he was probably in his late 30s. He had a wife and two children. She was British. He went into that unit, and he was determined he wasn’t going to leave until he went into remission. He stayed in there 206 days. Then finally his blood counts got better, and it looked like he may have been going into remission. We had to get him out of there at some point. I’ll never forget when I pulled the zippers off the side, then his two little children just reaching and talking and touching daddy. They hadn’t been able to do that for so long. He didn’t get infected in there except some minor
infections the whole time he was there, but unfortunately he died within a week after he left the unit.

Tacey Ann Rosolowski, PhD  
0:06:43.3
Was it from an infection then?

Gerald P. Bodey Sr., MD  
0:06:44.8
No, it was just his leukemia. We tried everything we had, and there wasn’t anything more to offer. But 206 days living in a tent—I mean, that’s really incredible. So over the years we studied just about every antibiotic that became available. We studied more than twenty new antibiotics in the leukemic population over the years, and some of them were in specific classes like the cephalosporins, and the aminoglycosides like gentamicin, and then the penicillins. But then there were some other drugs that came along like ciprofloxacin and clindamycin and so on. Then as time went on, too, we became more involved in studies of antifungal agents, because our leukemic patients in particular were susceptible to getting fungal superinfections once they had a bacterial infection. We studied clotrimazole and fluconazole and the liposomal form of amphotericin B. So we were involved in a lot of antibiotics over the years.

In addition to my interest in the infectious diseases, I was made the chief of chemotherapy in our Department of Therapeutics from 1975 to 1983. During that time we had about thirty new antitumor agents that we studied.

Tacey Ann Rosolowski, PhD  
0:08:44.9
What was your responsibility during that time?

Gerald P. Bodey Sr., MD  
0:08:49.7
That’s a good question. It’s been so long I’m not sure. To make sure that we had protocols and that the protocols were being followed and keeping track of toxicities and benefits and so on. And I had been—the National Cancer Institute had an investigational drug committee, in which they had people who were in charge of investigational chemotherapy at several different institutions around the country. We would meet at regular intervals and discuss studies and what things were becoming available and things like that. So that was part of my activity at that time. It was very interesting to be involved in learning these new drugs and what their side effects...
were. Then in some instances, it turned out and really had some significant benefit. Then the patients—we’re not curing patients—they would go into remission of their cancer and be able to go home and live for several months at least.

Tacey Ann Rosolowski, PhD
0:10:05.7
I get the feeling, as you’re telling me about all of these different dimensions of your activities, that this was really a period of time when cancer research was suddenly becoming organized—that there were all these parts of it, and many of them were ground-breaking, and suddenly you were just organizing how it happens so you could understand the results—really quantify the results and get systematic about it.

Gerald P. Bodey Sr., MD
0:10:34.4
There were some figures in cancer therapy that were well established in various institutions and we were beginning—Well, actually probably one of the most important factors was the treatment of choriocarcinoma with methotrexate, which is cancer of the uterus. It was at NIH, where I think his name was—I don’t remember his name anymore unfortunately, but this doctor who was the head of that area of cancer chemotherapy began using this methotrexate and curing women of their cancer. I mean, that was a really exciting time. I wish I remembered his name. He is a Chinese man. And that put a different perspective on things. Now we knew that if we had the right thing we could possibly cure people. So that was a real important advance, and I’m embarrassed that I don’t remember him because that really was a milestone.

There were several giants in cancer therapy at that time that were working with different drugs and so on and making some progress—not curing people but at least having them go into remission. So it was really the beginnings of organized therapy and therapies that were making a difference. For years, there wasn’t anything, and the drugs that became available were not very effective and often very toxic. But now we were beginning to see some drugs like methotrexate that did have some effect and we could do something. Dr. Freireich got involved in a four-drug combination, and nobody had ever heard something like that. It was called POMP. It was methotrexate and 6-mercaptopurine and prednisone and vincristine. That was very effective and it was used in children. I think some of those children were actually cured.

So then that was another component of things that were changing—using combinations rather than just one drug. Originally, you would start with one drug. If that didn’t work, then you had the next drug and so on. Dr. Freireich was one of the pioneers in saying, “Let’s take a couple of
the drugs and put them together.” As a matter of fact, some of us thought he was a little crazy when he first did this POMP regimen, but it worked. So there were all sorts of things that were happening in cancer. There were some new drugs that were coming out. Then again, in the field of infectious disease, we were now able to treat some of these infections. In fact, I believe before there wasn’t anything that really worked very well. So there were a whole lot of things going on at this time that made it a much more exciting area, and you were optimistic, like, “Now I got this new drug, maybe this is going to really make a big difference.” And some of them did.

Tacey Ann Rosolowski, PhD
0:14:21.6
That must have kept you working, too, that sense of optimism that there was something new, maybe something better just around the corner.

Gerald P. Bodey Sr., MD
0:14:31.7
It was really quite a warming experience, when you had somebody with acute leukemia and they were able to get in remission and go home and maybe live another six months or year. So it was really an exciting time. Then I became the medical director of the Cancer Clinical Research Center and assistant to the Director of Clinical Research in 1977. I don’t know. I’ve had more positions over the years.

Tacey Ann Rosolowski, PhD
0:15:12.8
What was involved in that?

Gerald P. Bodey Sr., MD
0:15:13.9
Part of that was when we had the Lutheran Pavilion construction. The top floor was a laminar airflow facility and those sorts of things. I already mentioned that I was a member of this Phase 1 and 2 cancer drug committee at that National Institutes of Health.
Chapter 14
A: The Researcher
Collaborations in National and International Networks

Story Codes
A: The Researcher
A: Activities Outside Institution
A: Career and Accomplishments
B: Beyond the Institution
A: Personal Background

Gerald P. Bodey Sr., MD
0:15:35.4
I was also a part of the Southwestern Oncology Study Group, which most of us were part of that. The NCI had several of these focus areas, and one was the southwest, another was northeast. Then these oncologists would get together and devise chemotherapy programs, and then they would all participate in them.

Tacey Ann Rosolowski, PhD
0:16:08.1
And what were some of the studies? Were there significant studies that were done through the Southwest Oncology Group that you recall?

Gerald P. Bodey Sr., MD
0:16:16.2
No, I’d have to really think about that a bit. There were some that were effective, but I—as I say, I would have to give some real thought to that. From 1974 to 1978, the NCI had a collaborative work with Soviet oncologists. We would meet—I went over to Russia once or twice for them, and they came over to us. I remember when they came here, they were in Washington, DC, and everybody who normally was involved with the oncology program was busy with something else. So they asked me to entertain these Soviets, which I did. It was a very interesting experience, because one of them wasn’t too fond of being in a Soviet country. He would talk to me on the side about this, that, or the other thing. It was a very interesting experience. I do remember going over there, however, one time, and we were in a building—it wasn’t a very big building. They had somebody there giving a lecture to the group in Russian, and I had a translator to English. But she spoke so fast, the poor translator couldn’t keep up with her. All you
could hear was this Russian gibberish, and you didn’t understand anything at all. It was really rather amusing.

*Tacey Ann Rosolowski, PhD*
*
*0:17:54.9*

The poor woman.

*Gerald P. Bodey Sr., MD*
*
*0:17:56.2*

Poor woman.

*Tacey Ann Rosolowski, PhD*
*
*0:17:59.5*

What was the intent of that exchange program?

*Gerald P. Bodey Sr., MD*
*
*0:18:06.0*

I mean, at the time, I guess, when our country was taking a position that we needed to establish good relationships with the Soviets. There were political aspects to it.

*Tacey Ann Rosolowski, PhD*
*
*0:18:21.5*

That was really during the Cold War.

*Gerald P. Bodey Sr., MD*
*
*0:18:23.0*

Yes. I don’t know who was behind this or anything, but it was, I think, just an effort on the part of us to be participants in the whole program that the United States had of trying to have some relationship with Russia. The NCI also started having a collaborative effort with South America. The way that came about was the head of the program at NCI, Franco Muggia and I were in Russia at one of the meetings and we were walking around and I said to him, “You know, Franco, we’re doing this with the Russians. Why don’t we do something with South America? I mean, they’re right down there, and they could certainly use some help and so on.” So he agreed that that was something to do. So what they did was they picked several cancer centers in South America and had one of our institutions have a relationship with them. I had had a close relationship for other reasons with the head of the National Cancer Institute in Brazil; Mosir Santasilva [phonetic] was his name, a really fine man. I was going down there anyway to his
institution—the National Cancer Institute in Rio. So we had our relationship with the Brazilians. Then all these groups would meet together once a year or something. It was a worthwhile experience. I don’t know that there were many earth-shaking studies that were done, but it did help get the Latin-American oncologists better organized.

*Tacey Ann Rosolowski, PhD*

0:20:22.8

What about the exchange with the Soviet oncologists? What did you get out of it? What do you feel you brought to them?

*Gerald P. Bodey Sr., MD*

0:20:35.3

That’s hard to answer. We got to know some of their people, and I’m not so sure that there wasn’t one or two anti-tumor agents that they had developed. But a large part of it was that they got to see how we went about doing our studies in an organized fashion. It was useful to have a relationship with these doctors who were there. I don’t know that a great deal came out of it in the long haul. But again, it was sort of trying to establish relations between ourselves and the Soviets, which hadn’t been very good up until that time. They did get something out of it, and I think we got a little something out of it also. The South Americans—I also had a relationship with the Peruvian—actually, one of the Peruvian oncologists came and worked at our institution as a fellow for several years. A very good friend of mine, Dr. Carlos Vallejos. Then there were several other institutions in some other countries that were tied up with one or another of the other cancer institutes in the United States. That went on for several years.

*Tacey Ann Rosolowski, PhD*

0:22:30.5

You’ll have an opportunity to add it when we look at the transcript.

*Gerald P. Bodey Sr., MD*

0:22:34.3

Carlos Vallejos. So we had some associations with him. I still do, actually.

*Tacey Ann Rosolowski, PhD*

0:22:50.0

Oh, really?
Interview Session: 03  
Interview Date: July 23, 2013

_Gerald P. Bodey Sr., MD_  
0:22:50.7  
I’m not involved in that anymore, but some endeavors—

_Tacey Ann Rosolowski, PhD_  
0:22:52.9  
And where in Peru is he located?

_Gerald P. Bodey Sr., MD_  
0:22:55.9  
Well, in Lima.

_Tacey Ann Rosolowski, PhD_  
0:22:59.1  
In Lima. Okay.

_Gerald P. Bodey Sr., MD_  
0:23:00.7  
Now, I don’t know what he’s doing right now. He had been actually the director of the Cancer Institute for a while, then I think he stepped down fairly recently. But he had had that responsibility for some time.

_Tacey Ann Rosolowski, PhD_  
0:23:13.5  
And so the connection that you had with him was talking about what research you did at MD Anderson, treatments? What were the exchanges like?

_Gerald P. Bodey Sr., MD_  
0:23:24.7  
Most of my exchanges with him were when he was a fellow under me at MD Anderson. Then when he went back to Peru, he was in private practice for a good while. So I was down there once or twice at that time. Then he became the head of the Cancer Institute, and I was supposed to go down to a meeting to receive several awards. Unfortunately, I got diverticulitis the day before I was to go, and I had to cancel. I really felt badly. He was the head for a while, and then he recently went back into private practice. He was trying to develop a strong Cancer Institute there. He is a very capable person. But this was one of the things that I greatly appreciated, and the position that I held, that I was not only trying to help people and do things here, but I got an
opportunity of going around to various other countries and meeting people and making friends and so on. I was friends with some of the important infectious disease experts, like Dr. Klastersky in Brussels, and Dr. Braveny in Germany. I attended some meetings there.

**Tacey Ann Rosolowski, PhD**

0:25:13.1

I know that people have commented, for example, on R. Lee Clark and then John Mendelsohn, both of whom had a more international perspective, trying to make those international connections with MD Anderson and institutions and researchers overseas. Why do you think that’s particularly important to do?

**Gerald P. Bodey Sr., MD**

0:25:39.0

Because many of the countries don’t have the resources that we have had, and that’s not entirely true. There are some important chemotherapeutic agents that came from foreign countries. But by and large we have been doing this for a longer period of time, and we have multiple institutions around the country that are contributing to it. So we have, I think, a lot more to offer in general than other countries. But I don’t want to demean them, because one of the important chemotherapy drugs came from Italy and some others from other countries. The Italians are pretty well organized. I went over there once at a meeting that they held in Milan, and they had some good chemotherapy that they were doing there in several institutions. We sort of have centered on our own accomplishments and sometimes ignore the fact that there were other countries that were doing things, too, that were important. I was in charge, for the whole United States, of a drug called Peptichemio that was developed in Europe. Unfortunately, it turned out not to be particularly effective. But it was kind of interesting to me to be in charge of something for the whole country. That didn’t happen very often. Of course, I was sad that it didn’t turn out to be a more effective agent.

**Tacey Ann Rosolowski, PhD**

0:27:30.3

Now, how did you find out about that drug?

**Gerald P. Bodey Sr., MD**

0:27:35.4

I don’t know for sure. It may have been from some time that I was in Italy, I would guess, but I’m not sure about that. It didn’t really—if my memory serves me correctly, it didn’t come
through the National Cancer Institute channel. It came from the man who discovered it and through contacts that he had.

Now, when MD Anderson completed the building with the Lutheran Pavilion in it, then I was able to move out of the old Center Pavilion. My office was on the twelfth floor of that building, and I was in charge of the—of course, we had one floor of laminar airflow, so again, a twenty-bed unit there. And I was some—I forget what title they gave me, but I was in charge of the whole thing there.
Chapter 15
A: View on Career and Accomplishments
Reflections on Contributions, Colleagues, and MD Anderson

Story Codes
A: Faith
B: Personal Background
A: Career and Accomplishments
A: Character, Values, Beliefs, Talents
C: Portraits
C: Offering Care, Compassion, Help
C: Giving Recognition

CLIP A: Character, Values, Beliefs, Talents
A: Career and Accomplishments
Blessed to Work at MD Anderson

Gerald P. Bodey Sr., MD
0:28:47.3
God blessed me greatly. It wasn’t that I was so great; it’s just that He’s great. He gave me these
opportunities over the years to see infections that at one time we couldn’t control at all being
cured, new drugs coming out that really made a difference for the patients. It was really a
wonderful experience, and I’m very grateful that I had the opportunity to participate in all that,
and also my colleagues that I had to work with.

CLIP C: Portraits
C: Offering Care, Compassion, Help
C: Giving Recognition
A Personal View of J Freireich

Dr. Freireich is a remarkable man. I mean, he’s still working. I’m sitting at home, and he’s still—
he’s about five years older than I am, and he still goes to work every day. He has a special place
in my heart. He and I became very good friends over the years. I first started working with him,
when I went to the National Cancer Institute and worked with him three years there. Then when I
finished up a year of residency, that’s when he came down here and I came down. I’ve been here
with him ever since. We’ve had a lot of experiences together, and I have a very, very high regard for him. He’s a brilliant man, and he’s a wonderful person. He does things that are just—nobody else would do.

One of our laboratory doctors had gone over to Florida, if I remember correctly, and was working over there, and he got sick. Dr. Freireich learned about it and went over there and thought he wasn’t being cared for. He brought him back over here. I mean, he just did it. He did things like that, not every day, but every once in a while he would get involved in somebody’s needs and do something that nobody else would do. I mean, I would never think of going and getting one of our former associates over here from Florida, without knowing who was going to pay the bills or anything. He just is an amazing man. I don’t often talk about loving other men, but I’ve got a real deep love for him. He’s been a good friend over the years. I feel real privileged to have been able to work with him all the time.

_Tacey Ann Rosolowski, PhD_ 0:31:45.0
That’s wonderful. That’s wonderful. And it sounds like together, you and he and other colleagues, really made a difference for people in terms of doing the work to discover treatment—to discover things that were going to really help people.

_Gerald P. Bodey Sr., MD_ 0:32:04.9
Yes. There were other places, too, where that happened. But we had a well-organized program here at MD Anderson, and it came a long way from what it was like when we first came and the way it is nowadays. It’s quite a bit different, as it should be over all these years. But it was really a privilege to work with him, a privilege to work here, and privileged to travel around the world and give lectures and all. So I feel greatly blessed.

_Tacey Ann Rosolowski, PhD_ 0:32:52.0
Is there anything else you’d like to add at this point?

_Gerald P. Bodey Sr., MD_ 0:32:53.9
I think I’ve talked enough, haven’t I? If there’s anything else you’d like to ask me, I’ll be happy to try to answer. I’ll give you all these papers here. When we had the laminar airflow facility there, we did develop a lot of things, like ways of quantitating contamination in a room and
topical regimens to kind of eliminate the organisms from the skin and the throat and so on. So there were a lot of things that we developed. Unfortunately, they didn’t turn out to be useful apart from laminar airflow rooms, and they sort of fell out of favor because they’re very expensive. They made it much more difficult to take care of the patient when you had to do all this before you could go in. I don’t know. Did you see that landmark paper from Internal Medicine? Did we talk about that?

Tacey Ann Rosolowski, PhD
0:34:05.5
The one that’s cited so often? The one that’s on the circulating—?

Gerald P. Bodey Sr., MD
0:34:09.1
Well, this is the one that the Annals of Internal Medicine picked out. I don’t know how many papers they picked out over the years. They had eleven disciplines of medicine, and they picked three papers in each discipline. My paper was one of the three in infectious diseases.

Tacey Ann Rosolowski, PhD
0:34:34.1
What’s the title of it?

Tacey Ann Rosolowski, PhD
0:35:30.8
It’s in the Annals of Internal Medicine, 1966. “Quantitative Relationships Between Circulating Leukocytes and Infection in Patients with Acute Leukemia.” Yes. We did talk about that. And that’s the one that’s been cited like over 1700 times or something like that. Very impressive.

Gerald P. Bodey Sr., MD
0:36:04.7
Well, I think you’ve heard enough about me now. But there were some real great accomplishments that occurred at MD Anderson. I mean, it started out as this one building with—I guess it was six floors high—maybe six or seven floors high. Part of it was a hospital, and then there was another section that was for laboratory space. Then they started to expand over the years, and now they have several buildings around. They’re taking over the whole city of Houston. It’s really been incredible how everything developed, and I think a lot of that credit goes to Dr. Clark.
Dr. Clark was an amazing man. He knew what he wanted done, and he made sure it got done. He was—I got to know him over time, and he was rather kind of frightening at first, because here’s this great Dr. Clark, and I’m just this newcomer and all that. But over—he was very dictatorial at times. I can remember one time when we had a meeting that I attended and they were discussing whether they were going to do something or other; I think it was go over to Center Pavilion. He said, “Okay, gentleman.” He listened to the heads of the various departments express their opinions. It was putting in the two laminar air filter rooms; that was it. When they were done talking he said, “Okay, we’re not doing it. End of story.” I don’t know who got through to him afterward to talk him into doing it, but he could be very dogmatic.

But he did a very, very good job directing MD Anderson over the years. He deserves a lot of credit for what—but there were a lot of people, too, who were very devoted to doing a good job at MD Anderson—nurses, and pharmacists and even the people who cleaned the floors. It was really a unique place. Unfortunately, there were some antagonisms. The biggest problem was us coming and being planted in when there was already a Department of Medicine.

Tacey Ann Rosolowski, PhD
0:38:56.8
You’re talking about Developmental Therapeutics?

Gerald P. Bodey Sr., MD
0:38:58.7
Yes, but over time that wore off too. It really was a—it still is—a wonderful place, and they’ve done great things in the life of many cancer patients.

Tacey Ann Rosolowski, PhD
0:39:18.6
Thank you very much.

Gerald P. Bodey Sr., MD
0:39:19.8
And as I said before, I feel blessed by God that I had the opportunity to come here, because that wasn’t what I intended to do. I told you about all that. I never had any—I didn’t even know anything about MD Anderson, so I was really greatly blessed. I have—I think you have it there—I have something like 1100 manuscripts over the years. I didn’t write them all. I think it came out to about 430 that I actually wrote. It was an opportunity that most people don’t get. I had the opportunity to travel around the world a good bit. I think I’ve been in something like
sixty different countries. Most of those, at least forty of them, I’ve lectured in at one time or another. It was certainly not something I anticipated when I first started out in medicine.

*Tacey Ann Rosolowski, PhD*

0:40:24.1

Amazing opportunities.

*Gerald P. Bodey Sr., MD*

0:40:26.8

It’s a great institution.

*Tacey Ann Rosolowski, PhD*

0:40:32.6

Is there anything else you’d like to add?

*Gerald P. Bodey Sr., MD*

0:40:39.8

No, I don’t think so. I just want to emphasize that I recognize that all that I have came to me from God. I’m a Christian, and I’m very grateful for what God gave me. It wasn’t what I did; it was what He did through me. I got to meet a lot of wonderful people and patients who were amazing in having to face up to a fatal disease. It’s been a great experience.

*Tacey Ann Rosolowski, PhD*

0:41:15.8

Thank you very much, Dr. Bodey. I’m really glad we had an opportunity to do this third session.

*Gerald P. Bodey Sr., MD*

0:41:20.6

I hope I gave you something useful here. Don’t hesitate to cut out anything. I don’t want you to have more pages here. I don’t know what else I have. I have all kinds of stuff, but you don’t want to see all of it. Do you have a copy of my bibliography?

*Tacey Ann Rosolowski PhD*

0:41:41.6

I do.
Interview Session: 03  
Interview Date: July 23, 2013

_Gerald P. Bodey Sr., MD_  
0:41:42.1  
Mr. Garza has one, I know.

_Tacey Ann Rosolowski, PhD_  
0:41:42.9  
Yes. He does, yes.

_Gerald P. Bodey Sr., MD_  
0:41:44.8  
I’ve been impressed with him, you know what I mean? I mean, having to start this up and all, I think that’s really a great accomplishment. I’m quite impressed with him. I have to get down there again and look around a bit. I haven’t been down in a long time now.  
[Redacted]

_Tacey Ann Rosolowski, PhD_  
0:43:05.3  
I bet. Well, Dr. Bodey, let me just turn off the recorder now. There’s nothing else you would like to add at this point?

_Gerald P. Bodey Sr., MD_  
0:43:11.0  
No, no, no. I’ve taken way too much of your time as it is.

_Tacey Ann Rosolowski, PhD_  
0:43:14.6  
No. I’m at your disposal. Well, I’m turning off the recorder at 2:20. Thank you very much.

_Gerald P. Bodey Sr., MD_  
0:43:22.0  
You’re welcome.

0:43:24.9