David Brown, M.D.

Narrator

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Interviewer

ACADEMIC HEALTH CENTER ORAL HISTORY PROJECT

UNIVERSITY OF MINNESOTA

ACADEMIC HEALTH CENTER ORAL HISTORY PROJECT

In 1970, the University of Minnesota's previously autonomous College of Pharmacy and School of Dentistry were reorganized, together with the Schools of Nursing, Medicine, and Public Health, and the University Hospitals, into a centrally organized and administered Academic Health Center (AHC). The university's College of Veterinary Medicine was also closely aligned with the AHC at this time, becoming formally incorporated into the AHC in 1985.

The development of the AHC made possible the coordination and integration of the education and training of the health care professions and was part of a national trend which saw academic health centers emerge as the dominant institution in American health care in the last third of the 20th century. AHCs became not only the primary sites of health care education, but also critical sites of health sciences research and health care delivery.

The University of Minnesota's Academic Health Center Oral History Project preserves the personal stories of key individuals who were involved with the formation of the university's Academic Health Center, served in leadership roles, or have specific insights into the institution's history. By bringing together a representative group of figures in the history of the University of Minnesota's AHC, this project provides compelling documentation of recent developments in the history of American health care education, practice, and policy.

Biographical Sketch

David Brown was born and raised in Chicago, Illinois. He earned his bachelors degree in 1956 from the University of Illinois at Urbana and his medical degree in 1960 from the University of Illinois at Chicago. He did his pediatrics residency at the University of Minnesota from 1961-1962, and was a fellow in endocrinology and metabolism there from 1962-1965. After working at the Wilford Hall United States Air Force Medical Center in Lackland, Texas from 1965-1967, he returned to the University of Minnesota as an Assistant Professor of Pediatrics and Laboratory Medicine and Pathology. He advanced at the University, becoming an associate professor and acting head of that department, and director of clinical laboratories. He served as dean of the Medical School from 1984-1993. After his resignation as dean, Dr. Brown returned to teaching and research, serving as head of the Clinical Research Center and as a Professor of Pediatrics and Laboratory Medicine. He retired in 2002.

Interview Abstract

David Brown begins by describing his childhood and education in Illinois. He discusses his experience attending medical school in the 1960s and his decision to join the University of Minnesota's Department of Pediatrics. He describes his experiences with Ellis Benson and others with whom he worked in the Department. He discusses the role of women in laboratory medicine and his work in comparative endocrinology. He explains the differences in the administrations of several different deans of the Medical School and the School's changing relationship with the University (and later, Fairview) Hospital. He describes some of the issues of town/gown in Minneapolis and in Minnesota at large, especially related to pediatric medicine. He describes his decision to become an administrator and his own tenure as Dean of the Medical School, the development of the Masonic Cancer Center, and the University's ALG scandal. He concludes with his retirement and his discovery of a passion for art.

Interview with Doctor David M. Brown

Interviewed by Dominique Tobbell, Oral Historian

Interviewed for the Academic Health Center, University of Minnesota Oral History Project

Interviewed at the Home of Doctor Brown Minnetonka, Minnesota

Interviewed on May 9, 2012

David Brown - DB Dominique Tobbell - DT Emily Hagens - EH

DT: This is Dominique Tobbell and Emily Hagens and we're here with Doctor David Brown. It's May 9, 2012, and we're at Doctor Brown's home in Minnetonka.

Thank you.

To get us started, can you tell us a little bit about where you were born and raised?

DB: Sure. I was born in Chicago, raised in Chicago, went to undergraduate college at the University of Illinois, went to medical school at the University of Illinois in Chicago, and graduated in 1960. I did an internship at the University of Illinois at what was called then the Research and Educational Hospital and, then, came to Minnesota for a residency in pediatrics.

DT: What led you to go into medicine in the first place?

DB: [chuckles] I'd had—everybody does—some experiences of interaction with physicians for personal kid's issues and so forth. Anyway, that's what introduced it to me. Then, it was sort of a common, almost traditional...I won't say traditional, but a commonly perceived objective for people of my generation. All that came together and led me to go into medicine. I had no other kinds of experience. It just seemed, in terms of the personal reaction as a patient, which was no different than most people's, it seemed worthwhile, fun, interesting, challenging, and I did it. That's all there is to it. [laughter] There was nothing more profound than that at the time.

I majored, actually, in chemistry as an undergraduate in college, so I took a *lot* of chemistry. That was the major scientific thrust at that time as an undergraduate. Then, when I went to medical school, I became involved as a research laboratory assistant to a pediatric endocrinologist [Ira Rosenthal]. He was a very, very inspiring man who would take me on rounds after I did whatever I did in the laboratory to the adjoining Cook County Hospital at the time. He used to show me some of the patients that he was seeing as a consultant. It was very, very intriguing. He saw all kinds of rare things.

Then, I came to Minnesota because he said that was the best place to go for a residency in the country. I knew nothing about Minnesota, period, except for the reputation of the Department of Pediatrics at the time. It was simply upon his advice. As a result of that experience, I realized that what he was saying was a reflection of the top-flight quality of the Department of Pediatrics, which had some of the leading academicians in the country in various subspecialties of pediatrics at the time and that, furthermore, there were many people in other departments of equal stature. So, at that time, it was one of the most highly reputed medical schools...and clinical teachers in the United States. Amongst the pubic medical schools, it was one of the handful of leaders, literally, at the time, a theme that people of my generation hear... I don't know if you've seen it or heard it, but it was the case at that time. It is no longer the case, but it was the case at that time. So it was a very inspiring kind of an environment. Because of that man's own specialty interest and so forth, it seemed logical and what I did in the research laboratory under his tutelage led me to the field of pediatric endocrinology and metabolism, metabolic diseases. During my fellowship in pediatric endocrinology, I did a lot of laboratory research and patient clinical research in various related areas. I had two years of residency here and, then, two years of fellowship.

Then, at that particular time, physician students had two choices. They either signed up for what was called the [F. B.] Berry Plan, B-e-r-r-y—you could have said it was b-u-r-y—which was basically saying that you were committed to go into one of the armed services. You got for that particular commitment, a willingness not to be drafted and to finish your residency and fellowship training if you wanted. The other alternative was to be drafted. So I took the Berry Plan alternative, ended up actually going to San Antonio [Texas] because, at that time, I was very, very well trained and they didn't know what to do with me, so they put me on the staff of the Air Force's major teaching hospital in San Antonio. The Wilford Hall USAF [United States Air Force], it was called, W-i-l-f-o-r-d H-a-l-l. I had a magnificent experience then. I was able to do a lot of reading, saw a lot of interesting patients, and so forth. It was a very intellectually stimulating activity.

By that time, we had three kids, three boys that were forty months apart, ages one to three. We enjoyed the San Antonio experience. In fact, it was so stimulating that we weren't sure that it was worthwhile taking any vacation time, so we didn't. [laughter] It was all a vacation. So anyway, that was very, very stimulating.

I also had a lot of interaction at that time with the people in internal medicine. It so happens at that time that the Air Force was involved with something that was called the

Manned Orbital Laboratory, which was the military equivalent of NASA [National Aeronautics and Space Administration]. Space travel became the big deal at that time, because of *Sputnik* [1]. Given the fact that I was sort of a free spirit, I found myself associated with a laboratory that was doing certain kinds of assays which were at that time very innovative. I had experiences in the Air Force of visiting several leading medical centers in the country where these laboratory procedures were being performed, so I learned a lot about those kinds of activities.

When I came back here, then, as assistant professor, I was also asked, because of that background, to consider setting up what was referred to at that time as a microchemistry laboratory for infants. In my usual fashion of going wherever the current takes me, I said, "Sure." That led me to an appointment in the Department of Laboratory Medicine and Pathology as well as Pediatrics and I continued with that relationship through my entire career. I don't know how this occurred but, basically, I fulfilled the expectations of both departments, neither recognizing that I was compromising the other, which was a very important point. No issue was ever made of that, *much* to the credit of the department heads, but that is the way it worked. Then, I was a researcher. I did a lot of laboratory research, actually, some basic, some applied clinical research.

As time went on, things began to evolve. About three years after I had begun that—I had set up this patient laboratory—the head of the department, Ellis [S.] Benson... Ellis died about a month and a half or so ago [April 15, 2012].

DT: He did?

DB: You didn't know that?

DT: Nooo.

DB: Did you interview him?

DT: Yes, I did.

DB: Do you want to record what I'm going to tell you? Because this is very interesting. I know more about it than anybody else currently alive, literally.

DT: Yes.

DB: So as an aside, let me tell you about Ellis Benson. Ellis was asked many, many years ago by the man who first established the discipline of laboratory medicine to be the head of the Department of Laboratory Medicine after he retired. His name was Gerry [Gerald] Evans, G-e-r-r-y E-v-a-n-s—I think it was G-e-r-r-y. So he became head of the Department of Laboratory Medicine. He decided to go on sabbatical to learn something more about his own research area. He left the United States and asked *me*, at that time, to become the interim head of the Department of Laboratory Medicine. That was about three years after I had come back. So I did that. When he came back, he asked me to be

in charge of the clinical laboratories in the University Hospital. Mind you, at that time, it was *the* University Hospital *owned* by the University. I did become the director of the clinical laboratories, which led me to be very deeply involved with the Department of Laboratory Medicine. He was, subsequently, asked to become the head of Laboratory Medicine and Pathology, because it became a combined department. So he had, clearly, one of the leading academic departments of laboratory medicine and pathology in the Unites States. It was very typical of these predecessors, not only him but all these other departments, at that time in the Medical School to be amongst the handful of leaders of public medical school departments in the country. He had a fabulous department. Not only did he provide comprehensive laboratory services for both the clinical laboratory side of the coin and the research side of the coin, but also pathology, the traditional pathology side of the coin. He ran a fabulous department, had *outstanding* faculty.

The current head of the Department of Lab Medicine and Pathology, Leo Furcht, had his fellowship here under Ellis Benson's tutelage.

Ellis was one of the finest human beings ever created. He was what I would classify as a humanist of the first order. He did it effortlessly; that is to say, it wasn't that everybody *knew* he was a humanist. This is the way he lived and acted. My wife [Sandra], particularly, was fond of Ellis because, as she pointed out, he would treat her not as my wife. He would treat her as herself, a very, very interesting and somewhat unique strength. As she complained, occasionally [chuckles], if she wasn't with me, people didn't know who she was. That was *never* the case with Ellis. He was an idealist. His personal interactions with everybody were spectacular.

This was reflected in the memorial service of last week, actually. He had died about a month and a half ago I'd say, roughly speaking, and the memorial service was attended by an overflow crowd of colleagues, classmates of his from medical school, friends from the community, retired faculty, active faculty. It was *extremely* touching. It was warm. It was very, very personal, as it should have been. I had the privilege of being the one non-family member to speak. I must tell you that I had to restrain myself, because it could have been overwhelming. I just got through that, but it was really tough stuff.

He was really spectacular. I would say, to quote old school, at the best in every respect, bar nothing. He was admired by everybody who had ever been here related to his department. I could fill you in even more than that, because there are many aspects of that *department* that deserve some emphasis because it was unique in many respects. So...

DT: Yes, please, if you can elaborate on that.

DB: Should I?

DT: Yes, that would be great.

DB: One of the things that had led it, for example, was the development of the field of medical technology. It had the first medical technology-teaching program in the United States as a formal academic and degree-granting enterprise. So medical technologists who became, subsequently, the teachers in medical technology here and elsewhere evolved from this particular program as one of the major features.

Ellis also had a somewhat unique perspective because he was, on the one hand, himself a basic scientist, but he had a very, very strong commitment to clinical medicine. Because of the imprimatur, if you will, of being responsible for those kinds of services for a patient care facility, he felt that it had to be the best of the best. Furthermore, because it was a research environment, it had to be deep as well as broad, and so it was. All the various subspecialties of clinical pathology or laboratory medicine, it's the same thing, were very carefully implemented and continue. So you had all the various diagnostic entities. Some of them were traditional and many of them were just simply expressions of not just excellence but of real depth in the forefront in each one of these areas, whether you're dealing with microbiology, or chemistry, or virology, or genetics, or immunology, or transplantation testing. Because this was a major transplant center, therefore, the laboratory had to provide the appropriate services for the most advanced aspects of assaying [such as, organ donor and organ recipient compatibility to enable the transplant program to prosper], and it did.

It had, at the time, some leading surgical pathology people in the country. It had pediatric pathology as a specialty. It's only recently that that has been renewed. There was a considerable gap, but now somebody has been hired, actually, in that particular area, which is wonderful. It had various specialty areas in genetics, both in terms of what was referred to as cytogenetic genetics and molecular genetics as well as inherited metabolic disease testing. It really covered the sphere that I can think of, of everything, literally. It was an environment where people were learning and practicing laboratory medicine, anatomic pathology, which covered both autopsy pathology and surgical pathology. Experimental pathology became another very, very major part of that department's activities and still continues.

Many of the support activities of the institution, in fact, are based upon that department's excellence. Transplantation could not have proceeded in the manner that it has, had there not been the significant laboratory support. That included both bone marrow transplantation and solid tissue transplantation. It also meant that some of the complications of transplantation such as virologic and all the microbiologic complications would be handled within the context of the same clinical laboratory oversight. That was very, very important.

There were many people in what became the Cancer Center faculty who, in fact, had their primary appointment in Laboratory Medicine and Pathology. Stephen Hecht, whose research links tobacco with cancer, has his primary appointment is Laboratory Medicine and Pathology. There's another man, who, as far as I know is still alive, Lee Wattenberg, whom you should interview, incidentally. He was a world-renowned cancer researcher [who was a professor in Laboratory Medicine and Pathology]. There are many other

people along those same lines that long since have left the department, but were amongst the people I'm referring to that dealt with cancer and immunology. In fact, John Kersey's own background was not only pediatrics but laboratory medicine and pathology. That's a major part of John's home base, so to speak.

I should have mentioned the Immunology Center. Have you interviewed Matt [Matthew F.] Mescher?

DT: No.

DB: You should. I don't know how old Matt is. I'll throw out a number. Let's say, he's fifty-five. [chuckles] Matt was recruited, actually, by me when I was dean to develop the Immunology Center. The home appointment of all the people on the faculty of the Immunology Center is Laboratory Medicine and Pathology. So you can see this beautiful web that I'm describing was really very important. But, it was also begun because of Ellis Benson's concept: that interdepartmental activities should be manifest and that his department would reflect not only the commitment to working with other departments but having faculty there from other departments. Pat [Patricia] Ferrieri, for example, who runs the Microbiology Laboratory, and Hank [Henry] Balfour, who runs the Biology Laboratory were originally both in Pediatrics, such as I was, actually. That was very typical of what occurred under Ellis' leadership. And there are many other examples.

DT: I'm glad that you elaborated on the department, because I have several questions to ask you about that, particularly on the important role that the clinical labs and the department played in transplantation. When I interviewed Ellis, it also became very clear to me that the department played a really important role in the development of cardiac surgery, too, in the late 1950s.

DB: Well, that's true. Actually—let me think of his name—Jesse Edwards was, at that time, one of the two or three leading pathologists in describing congenital heart disease, the pathology of congenital heart disease. The first cardiac surgery that was done at the U was congenital heart disease surgery under the leaderships of [C. Walton] Lillehei and [Richard] Varco. Jesse was the pathologist. It was very, very critical at that time to really begin to describe what was the nature of the anatomy of the hearts of kids, or adults if they lived that long, with congenital heart disease. Jesse was the one who led that program.

DT: He was also saying, I guess once the surgery is postoperative, that all the tests that were being run on the patients obviously went through the clinical labs.

DB: That's right.

DT: So there was that aspect.

DB: That's the point I was making. It was assumed, and it was appropriate, and it was expected that laboratory medicine, the clinical laboratories, would provide the quality of

the services at the most advanced level, which might not have been present and available in many other places in the country as transplantation began. But here, you had it in the context of the routine laboratory. It wasn't set up as a separate research entity. It was just simply a part of the expectation of Laboratory Medicine and Pathology that this would be the case. That aspect of operations is very unique.

Other unique aspects of that department that I should have mentioned or emphasized... In many other departments then classified as pathology, not laboratory medicine and pathology, would offer anatomic pathology. You know what that is: surgical pathology and autopsy pathology and the essentials of clinical laboratories. In other words, the services would go beyond those offered in most community hospitals. There's nothing wrong with the quality of community hospital pathology services, but it was just that the breadth and depth was not the same. Here it was just simply available. That enabled people who wanted to pursue transplantation.

DT: I'm glad you also brought up the medical technology program, because I'd asked Ellis about that. It seemed, from what I'd read in the Archives, that there was a relatively prominent role for women in the medical technology program.

DB: Well, it was not predominate; it was dominate. [laughter] The program was initiated by women. It was not only initiated by them...although there were exceptions where men also entered into the field. Initially, it was almost entirely women. The leadership of it continued in that same vein. At one time, way back when... This was before women, generally speaking, entered into the professional fields at all in any areas, period, with the exceptions of nursing, teaching, and clinical laboratories. There were no women in law at that time. There were no women in the—quote—hard sciences at that time. If a woman didn't want to go into one of those three areas, her options were limited. Yes, she could have been a librarian. I'm not deprecating that. My wife wouldn't allow me to do that.

[chuckles]

DB: She's at the library now.

[laughter]

DB: Seriously, the choices that women had were few and far between. So, yes, it was predominately women. Obviously, men entered into the field as some of these other areas evolved. Immunology, for example, and virology and others enlarged the scope of the genders involved with the laboratories.

DT: What do you think made medical technology and some of the other aspects in laboratory medicine so open to women?

DB: I suppose one thing easy to say, and I think it's probably true, is most fields of interest were closed to women by tradition with a few exceptions. Secondly, a woman's

role at that time was considered predominantly to be in support of her husband if she was married, or, if not that, then nursing and teaching and a few other things, but not many. That structure still exists in many fields. Change is slow.

One of my other interesting experiences was when I was asked to be on the original advisory committee for the Office of Research in Women's Health at the NIH [National Institutes of Health]. So I learned a lot about issues of the barriers of women to pursue careers in academic sciences. Particularly I said sciences, not the liberal arts. I participated at the time, as that office was being organized, with in-depth examination of what were the barriers and obstacles to progress and promotions for women in academia. So I became very aware of the issues of women pursuing careers, in general but specifically in the sciences.

DT: When you were director of the clinical labs, what were your primary responsibilities and were there particular challenges that you confronted in that role?

DB: Well, keep in mind, as I said before, that I participated as an equal in all of the clinical activities in pediatrics and pediatric endocrinology, so I pursued my own laboratory research or clinical research, which had no particular age orientation. Then, I did all the clinical activities, rounding in the hospital, clinic activities when I would see children in pediatric endocrinology, and I was also in charge of all the clinical laboratories. That gave me insight into classical management, finance of hospitals... I learned a lot about hospital finances, actually, at the time. I can't give you the exact chronology, but I was a member of the finance committee of the Board of Governors of the University of Minnesota Hospitals. So I learned all those things, through the experience of doing it. My responsibilities were, basically, to run all the laboratories and be financially in charge. Period. That meant you dealt with all personnel issues. You dealt with all financial issues. You dealt with pursuing at the recommendation and advice of whoever runs these particular laboratory components to say, "Should we do this?" or "Shouldn't we do this?" "How do we staff and finance the function?"... That responsibility led to increased relationship with the senior administrative staff of the hospital. So I got very involved in that sense with the financing of the Hospital and its administration.

DT: Was the lab also doing tests for physicians and hospitals outside of the University?

DB: That function was a so-called reference laboratory, which was available to other hospitals in the community. So if somebody wanted to use all of which I've described in conjunction with, let's say, their hospital laboratory, they could refer the specimen to us. We developed a reference laboratory component so that became more than an ad hoc experience. It became a regular entity with its own financial identification.

DT: Going back to when you were first talking about your decision to go into pediatric endocrinology... I'm curious, in those early years what were some of the major diseases that pediatric endocrinologists were dealing with?

DB: It hasn't actually changed. The nature and substance has obviously changed, but the general issues didn't change. For one thing, general matters relating to childhood growth and development, sexual differentiation, expression of sexual differentiation, specific organ deficiencies or excesses. So we dealt with the adrenal glands, the thyroid, the parathyroid, and so forth. We obviously dealt with diabetes in general...at that time, only Type 1 diabetes. Type 2 diabetes in children and adolescents was unheard of. In fact, that's all recent stuff. [Growth hormone treatment was not feasible at that time because neither the natural product nor the alternative molecularly derived product had become available.] Then, when things like growth hormone came into play, the question really was who do you treat? Who don't you treat? What are the criteria? What are the outcomes? What are the complications, and how to monitor them and so forth? Basically, the general background hasn't changed. What's changed is only the content of each of those realms. If you looked at the textbook of pediatric endocrinology, you'd see, generally speaking, the same titles.

DT: In the 1950s and 1960s, my recollection is that there were the in-born areas of metabolism that were becoming better understood at that time and that they were being translated into new testing.

DB: Yes. Here is the situation in that regard, actually. The man about whom I spoke earlier, who interested me in pursuing this career in the first place, although, he was an endocrinologist, he had his particular interest in so-called inherited metabolic disorders. So it was along those lines that I began to do some parts of my own research. The University Hospital laboratory developed a metabolism section. I don't know exactly what the situation is now because I haven't been around for a while, but some of that was in conjunction with the State Board of Health, who does the basic newborn metabolic testing here in this state. So it was done pretty much closely in conjunction with them.

DT: Was phenylketonuria [PKU]...?

DB: That was one of the first ones, actually. You're right.

DT: What was the name of the endocrinologist that you were working with?

DB: Ira Rosenthal. Do you mean way back when [I was in Chicago]?

DT: In Chicago, yes.

DB: Yes, Ira Rosenthal.

DT: You mentioned earlier that the Pediatric Department had a really excellent reputation when you came to Minnesota. Can you elaborate a bit more on what the atmosphere in the department was like?

DB: You bet. It was very, very, very stimulating. I'll put it like that. The orientation was to ask questions in diagnosis as well as therapy, to continually question the existing

knowledge. That type of interaction occurred at the bedside, so to speak. It was an ongoing orientation. That attitude prevailed in all the subspecialty areas of the department, whether it was endocrinology, or kidney disease, or infectious disease, or neurologic disorders, congenital heart disease, gastroenterology, immunology, oncology, hematology.

Harvey [L.] Sharp was one of the first pediatric gastroenterologists in the country. Bob [Robert] Ulstrom was one of the leaders in the development of pediatric endocrinology. Lewis Wannamaker was world renowned in infectious disease, and he ultimately trained many people who themselves became leading people in the United States in infectious disease. [Bill Krivit led hematology and oncology.] Bob [Robert] Good was a world-renowned immunologist.

[break in the interview]

DB: He was one of the proponents of the concept of "ontogeny recapitulates phylogeny." Phylogeny, phylogenetics...basically interspecies. Ontogeny is development. So ontogeny recapitulates phylogeny so there are things in the development of, let's say, humans that mimic things that occurred in birds and other species. That is the concept of ontogeny recapitulates phylogeny. Well, he was interested in that intellectually. A lot of his research in immunology was based on that concept. So he would pursue experimental work that would show how it came about that humans are what they are immunologically. He, clearly, was one of the world's leaders in that realm in things that we now take for granted: the concept of B and T cells, for example. Just the concept of it was Bob's idea. There were other people that participated in the world, but he was clearly one of the handful of leaders in that. That was why he was recruited to [Memorial] Sloan Kettering [Cancer Center, New York].

I used to go on all of Bob's rounds. It was a Saturday morning highlight. We didn't worry about the days of the week, hours of the day. Totally irrelevant. That may not have been good in some respects, but that's the way we lived. He used to run these rounds that were *fantastically* stimulating. In what was then called the [Variety Club] Heart Hospital, there was an auditorium. He used to sit in the steps of the auditorium and we would pick out three cases to present to him off the top of the head. Not everybody, but a lot of us used to attend it regularly regardless of the topic. The sessions were intellectually stimulating.

I became aware of a—quote—new hormone [calcitonin] that was described in two other places in the country. Some of this was discovered in salmon at the University of British Columbia in Vancouver where it had been extracted from an organ called the ultimobranchial body, a fancy word. [chuckles] Embryologically, it has its origin in certain places in the embryo. I found out that there was such a thing [an ultimobranchial body] in birds, so I said to myself, "Maybe we could find some basis in birds to understand the function of the hormone." Nobody had a clue as to what that the function of that hormone was.

Do you know what teleology is? Things are the way they are because they are meant to be and if they're meant to be, you should be able to figure out why they're there. That's teleology. So by pursuing this phylogeny ontogeny bit, I said to myself, "We should be able to study this in birds." I found out that this ultimobranchial body in birds exists as an isolated organ. In the human, these are simply cells that are called the parafollicular cells [cells from the embryologic ultimobranchial body are incorporated into the thyroid gland as parafollicular cells]. Some of these parafollicular cells are in the thyroid gland and some of them are also found in the thymus in the mediastinum. In the human, nobody has a clue what difference it makes to calcitonin's function. You can get cancer of that cell, so-called medullary carcinoma of the thyroid. It's really a cancer of these parafollicular cells, but nobody has a clue as to whether or not they serve any function at all in humans.

Anyway, under Bob [Good]'s support, I got a small grant, as I recall, from the Minnesota Medical Foundation and I did some research in chickens to see whether we could define what purpose they served. I don't know if you know it, but birds have a unique relationship between egg laying and the nature of their skeleton, because the calcium that serves as the shell of the egg is derived from a particular portion of bone that changes in the process of egg laying. How about that? [chuckles] I spent some time learning how to remove this gland. Dig this. What does a pediatrician know about that kind of stuff, huh? We had day-old chicks that were sexed by the chicken breeders... So we got ahold of these day-old chicks, figured out how to apply the anesthetic to them. We learned that we could anesthetize the chicks by lowering their body temperatures in the refrigerator.

[laughter]

DB: You took them out—they were alive—and when you warm them up, they were perfectly fine. We could operate [to remove the ultimobranchial bodies] then, because they wouldn't bleed. You took them out of the refrigerator, you'd operate and you found out where these glands were, and you removed them. You'd say to yourself, "I'll let them grow up and see what happens." I did some research, studied with somebody [Jennifer Jowsey] at that time who was a bone expert in the pathology of bone at Mayo [Clinic, Rochester, Minnesota]. She taught me how to examine the bones of chickens histologically. Then, I also did a study of what happens during the process of egg laying to the bone and to the bird if you remove these glands. To make a long story short, it doesn't make any difference.

So no one has yet to figure out the purpose of this hormone in mammals. It's called calcitonin. I suspect that its raison d'être has got to do with something that we all—the antievolutionists wouldn't like this—were derived from the sea. If you look at the composition of seawater, it's got a lot of calcium. It's also got a lot of sodium. [D.H.] Copp postulated that calcitonin had some function allowing salmon to go from the sea into fresh water without a chance in their serum levels of calcium and sodium. In fish, the ultimobranchial body is located alongside the gills and guess what. The gills are the interaction site of fish with the water. But if you look at the concentration of calcium and sodium in the serum of fish, it doesn't change at all between fresh water and saltwater.

That same hormone has been labeled not only relating to calcium metabolism but sodium metabolism. So neither calcium nor sodium concentrations change. My hypothesis is that it is this gland that is responsible for maintaining the serum concentration of fish regardless of its environment. So in humans, it's probably just simply vestigial. Isn't that interesting?

DT: Yes.

DB: And it's probably vestigial in birds as well.

There was a fellow of Bob's laboratory at that time with whom I spent one Saturday dissecting dogfish sharks, squalus acanthias, which we could buy pickled in formaldehyde. We spent one afternoon seeing whether we could remove the ultimobranchial body from the pickled dogfish shark. We thought if we could do the ultimate experiment and if we could do that and keep the animal alive, we could test this hypothesis by putting it either in fresh water or saltwater and see what happened. Well, they used, at that time... Do you know what line drawings are? Before the development of photography for books, there was a publication from the head of the Department of Anatomy here at the U, as I recall in 1917, in the Journal of Anatomy, where he described the appearance of this gland in the dogfish shark. So we used these line drawings and took out this gland. Well, there's no way that that fish would have survived [it was brutal surgery which would have destroyed the shark].

[laughter]

DB: So that was the end of the experiment. But it was typical—do you see what I mean?—of the way things functioned in the Medical School at the time. One could pursue questions that arose from intellectual pursuit.

DT: So it was beyond just pediatrics that there was that kind of the atmosphere?

DB: Yes, it was the general atmosphere whether you were in medicine, surgery. The Ph.D. in surgery began here in Minnesota. That was an intrinsic concept built into the institution.

In fact, Al [Alfred F.] Michael and I both enrolled in... I don't know if Al told you this. He took a lot of courses in biochemistry. So did I. We thought at one time we'd go on and get Ph.D.s. Neither of us bothered to go to that particular point, but we did all the classes and research that would have been required. But we never got into the point of doing a thesis because it didn't matter, actually, in our careers.

This was very... How can I put it? This whole approach was typical in this Medical School. It's no longer the case.

DT: It sounds like an exciting time in the 1960s.

DB: Pshoo...profound. Actually, it began in the 1950s all the way through to the 1960s.

[Break in the interview]

DB: Wannamaker was one of the handful of people in the world involved with the mechanisms behind rheumatic fever and streptococcal immunological disorders of the kidney, acute glomerulonephritis, for example. Lew was really very, very key in getting that done, and that led to the recruitment of Paul Quie and a fellow named Alia Ayoub who went down to [the University of] Florida, and a lot of other folks that were offshoots of Lewis' research. Pat Ferrieri and Hank Balfour [and Ed Kaplan] were trained in infectious disease under Lew Wannamaker.

The whole pediatric cardiac program, you're familiar with, so I won't go into that. But there was another example of first heart surgery in kids, first catheterization in kids. A lot of stuff like that was really going on. The leading childhood kidney disease program in the country, in the world actually... It was quite extraordinary.

I got involved with the kidney group. I can't remember why or how, but I got involved with it. I ended up with my offices and research laboratories in pediatric nephrology, actually. I used to go on rounds with them. I ended up taking board examinations in pediatric nephrology. So I ended up with four boards—[chuckles]—general pediatrics, pediatric endocrinology, pediatric nephrology, and what was referred to as chemical pathology. Crazy. It was just sort of like it was there, so you just go with the flow and that's what you do. [laughter] Isn't that extraordinary? Can you imagine an environment like that?

DT: Yes. That's the perspective I've gotten from pretty much every one I've interviewed from the Medical School.

DB: Yes, it's true. It's not an exaggeration. Whoever told you, it's nothing to do with their egos. This is simply the way it was and that's what led this fellow [Ira Rosenthal] in Chicago, because that was the environment, to suggest that I come here. See, the same thing happened in many departments throughout the Medical School. The same thing happened in the basic science departments—I'll go into that—physiology and Maurice Visscher [Head of the Department of Physiology at the University from 1936-1967]. Biochemistry at that time had Wally [Wallace] Armstrong and Wally recruited a couple of faculty: Joe [Joseph] Larner, who became a member of the National Academy of Sciences and went out to UC-SF [University of California-San Francisco] as I recall, and Paul Boyer. Paul Boyer was one of the first people in the country who did research in the chemistry of mitochondria.

Al and I took these courses in biochemistry under these folks. We took a course in what was called nucleic acid chemistry. Nobody would ever use that terminology now. I can't think of the guy's name who taught it. That became molecular genetics. That was it. Why would we take these courses? Nobody does that now. But why not? Isn't that crazy? [laughter] All this was going on. It was a very, very stimulating environment.

DT: Were you and were others in the department getting a lot of NIH funding at this time and was this culture supported by funding as well?

DB: It was predominately NIH funding and small grants we'd get from the Minnesota Medical Foundation or the American Heart Association, the American Cancer Society, [also the American Diabetes Association and the Juvenile Diabetes Foundation] and the like, those kinds of organizations, but predominantly NIH.

Personally, all that was going on...very stimulating. I kept active not only here but then nationally in the organizations of laboratory medicine, for example, ACLPS, it's called, the Academy of Clinical Laboratory Physicians, and Scientists. I actually was president of that. Then, I became very involved with the Association of American Medical Colleges, AAMC. One thing and another led me to become the chairman of the Council of Academic Societies. So most of the scientific academic and professional societies had a component of the AAMC and I became chairman of that. Then, I became a member of the executive committee [of the AAMC].

Then, I became dean.

[chuckles]

DT: I've got some follow up questions before we get to your tenure as dean.

John Anderson was chair of the Department of Pediatrics when you arrived.

DB: Right.

DT: What was he like as chair?

DB: John's attitude was he wanted to see people thrive under the banner of excellence. He gave everybody their head, so to speak. You know, he didn't tell you what to do. He just wanted people to do well and be excellent. Period. There was no more motivation than that. He was an enabler. Some of the other department heads really felt that he was too—how can I put it?—willing to see things move in the direction that they should and they felt that he was doing it at their expense at times, but he did it anyway. So there was jealousy and a little bit of antagonism, actually.

DT: Did you have much sense of how Robert Howard was as dean of the College of Medical Sciences?

DB: Bob was the same kind of a stimulating person. He ran up against a lot of hostility. At that time, the concept was that department heads—none of whom is still alive, incidentally; there's nobody to refute my statement [chuckles]—should be the leaders and the deans sort of worked at their command. Bob got into difficulties with them because he thought that the departments should financially contribute to the Medical School.

They would argue that, well, after all... Of course, everybody in their departments had appointments in the Medical School, right? But their point of view at the time was that they didn't want anybody else to tell them what to do. So he got into conflicts with them. It's too bad. Obviously, a lot of this occurred under his aegis. So when I used to go to dean's meetings with Ellis Benson on behalf of Laboratory Medicine and Pathology, Bob Howard was the dean at the time. I got some interaction with him at the time. That was the situation. Nobody interfered.

Oh, at that time... This goes back quite a ways, actually. I don't know how much of the University Hospital history you have.

DT: We have some of it, yes. But we're happy to hear more. [chuckles]

DB: You're going to get more. At that time, University Hospital was a teaching hospital but it was also a county hospital equivalent for many of the outstate counties. Patients that were seen at the University were private pay patients and there were some so-called county papers. It was a mixed environment. There were inevitable clashes between the private practice side of the coin financially and the income derived therein and how the money was used... I shouldn't say how, but by whose authority was the money used?

When I became dean, I decided, at the time, that that particular situation was untenable. It wasn't healthy for the Medical School. I was able to convince the heads of the departments to create a fund that would go under the aegis of the Dean into the Medical School. I also developed a relationship with the then head of the hospital, Bob [Robert] Dickler. Basically, we had a handshake agreement that the Medical School and the Hospital would share financials equally—equal partners—and in the recruitment of heads of clinical departments. He participated in the searches, etcetera. But, by and large, it was a handshake relationship that was based upon interpersonal relationships and it worked out fabulously.

I don't know how much you want to get into the University Hospital side of the coin.

DT: We're very interested.

DB: [laughter] It's interesting. It's a never-ending saga.

Anyway, that was the nature of the Hospital [of relationships between university hospitals and medical schools in general].

Have you read Leonard Wilson's history [Medical Revolution in Minnesota: a History of the University of Minnesota Medical School]?

DT: Yes.

DB: Did you read the chapter on the Mayo Clinic?

DT: It was a while ago, but yes.

DB: Read it again because he described in there... It was, let me think. The University Hospital, I think, was established around 1916 or 1917. The Flexner Report was published... Do you know what the Flexner Report is?

DT: Yes.

DB: It was published, I think, in 1915 [correctly, published in 1910]. At that time, the whole business of the organization of medical education was changing as a result of the Flexner Report. But if you look at the section in the Flexner Report... Do you have a copy of that, by any chance? I would assume there is in the library. I used to have a copy, but I had to leave it behind, unfortunately. In there, look up the University of Minnesota. In there, they say that when the University of Minnesota has *its* hospital, then it will have a complete medical education enterprise. I'm paraphrasing, but that's what it really said.

Then, if you look at Leonard's book and look in the section on the Mayo at the time, the question came up, "Well, what should the relationship of Mayo be to the University of Minnesota?" Now, Mayo wanted to offer graduate degrees and they needed a mechanism to do it, so they wanted the University. But there was a town versus gown controversy that's played up in Leonard's book that basically said the controversy was, "Why should the Mayo Clinic have the imprimatur of the University?" Nonetheless, obviously, that did occur [Mayo did receive authorization of its graduate degree status via the University]. But you could see the town versus the gown thing and that ain't nothing new.

So here you are, essentially, a century later...back again, very similar, obviously different authorities, different privileges, but, by and large, the same theme, because the town versus gown controversy is not new and probably will never change unless there's a single payer mechanism. [chuckles]

The University Hospital thrived under this environment and it was about, oh, gosh, let's say, 1990, 1991, something like that, the question Bob Dickler and I had to deal with at that time was, "Should there be a change in relationships between the University Hospital and the other healthcare delivery systems in the community?" We undertook an independent study, hired a consultant, and they came up with the conclusion that we should have some kind of a financial relationship and functional relationship with some other entity. At that time, it looked as if the best relationships might occur through Fairview [Hospital Health Services]. It did not, however, stipulate what the exact nature should be or the financial responsibilities and obligations. Then, in fact, Fairview bought the University Hospital, unfortunately.

As I said subsequently to the then President of the University Nils Hasselmo... After Nils had left, he came back once to visit his wife who was ill in the hospital here and I had gone up to see her. This was after I had resigned as dean. I saw him in the hall and he said, "David, how's the Medical School?" I said, "The relationship with the Medical

School to Fairview is not adequate." He mumbled and said, "Well, we had to do something because we were under a lot of pressure from the Board of Regents." I said, "Yea, but, Nils, the devil is in the details. It was a lousy arrangement and we're suffering. We are suffering from the inadequacies of that relationship." As of today, I don't know what's changed, but supposedly something is changing. I have no idea whether this fiasco with regard to the bill collection thing ["Hearing to Take on Fairview Collection Tactics" *Saint Paul Pioneer Press*, May 30, 2012] will or won't affect that. Nobody knows and nobody is going to tell you either.

[laughter]

DT: I've heard from other people that the primary motivation for selling the Hospital was financial.

DB: That's right. Unfortunately, when the Hospital was sold and the arrangement that was made, the contributions the Hospital was making under this handshake agreement that I had developed, were lost overnight! Fairview had no financial responsibility or obligation. Oh, they paid the house staff. At that time, the money for the house staff came from the Federal Government anyway, through a Medicare agreement. Fairview was simply the conduit. They didn't play any particular role. But it was a question of dollars flowing with the patients. So, under what conditions do the patients get referred to the Hospital or to the faculty at the Hospital, is a better way to put it. The Hospital is sort of... Take Target for example. What's more important? Target or the producer of the products that Target sells? The answer is, well, it's a combination of both. Right? Not one or the other, it's a combination of both. It's the same logic. The Hospital is obviously the place that provides the mechanism for the interaction of the patients with their healthcare, and, yes, they collect a good share of the money. Right? But if the faculty didn't exist, where would they [Fairview] be? So it goes back to the fact that the devil is in the details.

DT: When Fairview bought the Hospital that made the Hospital part of the broader health system. Then, the faculty were getting referrals from within that system?

DB: No, they're not. See? Devil's in the details. There's no *a priori* arrangement whereby the Fairview system's patients would be referred to the University Hospital. It's only recent that the cardiology section of Fairview Southdale Hospital relates to the University cardiology group, but that was not a part of the original plan. But that's it. See what I mean?

DT: In theory, it could have brought in more referrals...

DB: Sure.

DT: ...but the lack of particular...

DB: There should have been an *a priori pro forma* agreement. Yes, sure, the then Fairview Hospital across the river...but to begin with, there was no relationship with any other component in the Fairview system. The University of Minnesota Hospital-Fairview relationship is distinct from other parts of the Fairview System in terms of medical staff relationships. The Fairview Physicians Association has *nothing* to do with the University of Minnesota Physicians [UMP], for example. There are analogies, but if one company buys out another company, unless you agree specifically that the company who is buying it doesn't want certain products, then that's fine to split it off.

That's what happened with—you probably don't know this—Pillsbury. When Pillsbury disappeared, General Mills bought some products. Not all of them. But they didn't want them all.

Again, you look...that's a business relationship that was not well done.

DT: Do you think that reflected those ongoing town/gown sentiments in the fact...?

DB: Yes, you bet.

DT: The town was protecting itself from the gown?

DB: The same thing happened in the origin of the current Gillette Hospital.

Before I became dean, I became aware of the fact that the then Gillette Hospital was located at that time in Saint Paul—I don't remember exactly where—in an ancient facility, which needed replacement. I decided that we should explore the possibility that the Gillette Hospital become part of the University Hospital. This was before the current University Hospital was even completed. There was a component of the Hospital called the Children's Rehabilitation Center and it was no longer being used for the purposes that had been intended. It had been started at the time of the polio epidemics for the rehabilitation of children that had been afflicted with polio, but there was no need for that anymore. We were able to get a couple floors of that hospital that would go to provide the Gillette facility. I was able to convince all the department heads in writing with their signatures that they would guarantee administrative autonomy, financial autonomy, that there would be joint utilization of heat and light, Pharmacy, Laboratories, Radiology, Nursing, the support mechanisms, so there would be a financial gain, because it's a shared facility. Then, the University would gain access to the interesting patients that Gillette had at the time. But the orthopedic surgeons, in particular in Saint Paul, had operated there for many, many years, and they considered it their province. But if it came to the University, regardless of how it had been signed off, they wouldn't trust it. See what I mean? Town versus gown. It didn't happen.

The same thing is playing itself out, as we speak, with regard to Shriner's [Hospital]. The Shriner's organization has changed nationally since the mechanism of payment for healthcare has changed in the United States. So the Shriner's organization nationally isn't what it used to be [as financially strong] nor should it be, because it's not necessary.

If you go down to River Road [East River Parkway, Minneapolis, Minnesota]... Did you ever see that facility?

DT: Yes.

DB: It's *fabulous*, but you don't need it. In many respects, it is redundant. When the current Children's Hospital, the new one, was planned, they said, "Let's have a floor for the Shriner's." Lots of luck. The same situation resulted. Talk about phylogeny recapitulation...there you have it. [chuckles] It's the same thing. It's crazy. Town versus gown.

DT: What about the establishment of the Children's Hospital in the late 1960s, early 1970s, the efforts to set...?

DB: It actually goes back to the 1950s. Apparently, before our time, the idea of having a children's hospital evolved in the community. There were none. This is all secondhand. I experienced none of that. At the time, the then head of the Department of Peds [Pediatrics], John Anderson, and the then head of the Department of Surgery, Owen Wangensteen, were totally disinterested in it. They were satisfied with the way things were, so they basically turned off the community. The idea was to build a children's hospital on land adjacent to the University near Oak Street, in that same area, mind you, where it's likely the UMP is going to develop a clinic. So it fell apart.

Then whenever it was after I came back from the Air Force; so let's say 1968, 1969, two prominent physicians decided they were going to build their children's hospital. These two physicians and one of the community leaders came to a meeting of the faculty and, basically, at that time said, "We have made up our minds. The children's hospital is going to go on Chicago Avenue [Minneapolis]." Period. John Anderson was still the head of the Department of Peds. He said, "What about education and research?" One of the gentlemen at that meeting said, "Well, our research laboratories are in the community." So there it is. There have been at least two additional attempts. One formal one was made by Al Michael when he was the head of Peds. Another one was done more recently than that. They all came to nothing, which you know.

Who did you interview on that side of the coin?

DT: I actually interviewed Arne [Arnold] Anderson.

DB: Oh, you did?

DT: Yes. [chuckles]

DB: He's the unnamed person.

DT: He's the unnamed pediatrician.

DB: Does his story change from what I said?

DT: Uhhh, no.

DB: He's the pediatrician.

DT: Yes. Right.

DB: Bless Arne, he's a nice man.

DT: Yes.

DB: He and I are very friendly. He came to Ellis Benson's memorial service, actually, so I saw him a few weeks ago. He looks great.

DT: As far as I can ascertain, it's the same argument he's been making from the get-go.

DB: Unfortunately, it came up again. Fairview was going to put up significant dollars and Allina [Health System] said, "We don't want the Fairview association." Well, Fairview has already committed \$75 million to the entity. Why shouldn't they have an association? It also ran up against some significant cash flow total. The bottom line cash flow relates to the care of children. So they didn't want to lose the association. My understanding is that a lot of pediatric specialists in particular in the community said that even though they were guaranteed that the ones who were currently on staff would have their own financial autonomy, not new ones but the then current ones, they were afraid that, somehow or another, their input of patient referrals would be impaired because of the relationship to the University. Town versus gown.

DT: I know you spent most of your career in Minnesota, but do you have a sense of whether the town/gown issues here are worse than they are elsewhere?

DB: Ummm... [sigh] Let me put it to you like this. Let me give you examples where it's played out differently. Then you can tell me. Let's pick out the leading places in the country: Boston Children's Hospital, Philadelphia Children's Hospital, Cincinnati Children's Hospital, and Denver Children's Hospital. There are probably other examples, but let's just say those. In every instance, they are on the campuses of the university. So what's the answer? My answer to the question is rather than being subjective and telling you what I think the answer is, I just take those examples and then *you* tell me what the answer is. Do you know what I mean?

DT: Yes.

DB: It depends on what you aim to be. Is this good? No. What are the harms? Competition. Is competition the best? Well, it depends, off the record [whispered].

DT: [chuckles] That's off the record?

DB: It's off the record. If you're a Republican, competition is the answer to everything in healthcare. Right? That's what they *say*. After all, it's going to solve all the access issues. It's going to solve all the financial issues. Bunk.

DT: Because that's worked so well up until now.

DB: That's part of the answer to your question. What is the result? That's one issue.

The second issue...very practical. How much more potent would fundraising be [unclear] tremendously focused? Can you imagine that? The big difference it would make? It would be cost saving. Rather than getting into the internecine conflicts, if you really had a simple theme and played it out at that level, it would be a totally different realm. But there you have it.

DT: Also in the 1960s, the College of Medical Sciences was about to be disbanded and reorganized into the health sciences. In general, there was a move to expand undergraduate enrollments in the health sciences and to reorganize the health sciences. I wonder if you had any sense of that at the time.

DB: What date? The 1960s, 1970s?

DT: Yes. Beginning in the mid 1960s, there were committees. Elmer Learn chaired the committee to reorganize the physical facilities of the health sciences.

DB: It was really preceded by a national initiative. Basically, there was the perception throughout the country that there were not enough primary care physicians and, in particular, rural healthcare providers were inadequate in terms of the numbers. That led to a lot of pressure throughout the country to consider some changes in the mechanisms by which one educated and trained those people.

So at one time, there was a lot of pressure to develop a new medical school. In fact, the thought was of developing a medical school in Saint Paul. Why not? If you have one in Minneapolis, you have to have one in Saint Paul. The compromise that was made at the time was to develop the Duluth Medical School. I can't give you the exact number of years ago. But not too many years ago, it finally became a part of this Medical School. It was always part of the University of Minnesota. It was always a two-year medical school.

In other parts of the country, however it led to different medical schools, so at Illinois, for example, they diluted out their initiative and they developed branches of the medical school in Rockford, Springfield, and Centralia. In Alabama, they had Southern Alabama in Mobile. In Florida, in addition to the main medical school in Gainesville, they had one in Tampa, and I don't remember where else. A couple of others...it happened all over the country. So there were other kinds of medical schools. Tennessee had East

Tennessee Medical School in Knoxville. Do you see what I mean? I can't even cite them all, to be honest with you. So that was the increase in the numbers, at the time.

The concept of the Academic Health Center... First, it was called the Health Sciences. Then, it changed to the Academic Medical Center. It didn't amount to any difference, frankly. It's a major bone of contention right now. I have no idea what the president of the University is going to decide. Some of us attempted to justify a significant change from its previous configuration. The previous configuration apparently afforded an opportunity to create much, much larger centralized administrative support for the proliferation of all kinds of administrative support personnel. What relationship does the Medical School have to Veterinary Medicine? We knew that the Veterinary Medicine Center at the U was just outstanding. Some of our pets were taken care of there for tertiary care, but what did that have to do with the Medical School? Nothing. There was a lot of other financial overlap in conflicting activities. Deb [Deborah] Powell and Al Michael and I have provided input to this committee and to the current president of the University [Eric Kaler].

DB: That's the answer to your question. Let me put it to you like this. In 1993, if you looked at the standing of the University of Minnesota Medical School based upon Federal support for sponsored research, we were ranked fifteenth in the country, private and public included. Well, you read recently that we're what?

DT: Thirty-five.

DB: Thirty-five, thirty-six, something like that. [groan] That is *not* the Medical School that I knew by *any* stretch of the imagination. Has the Academic Health Center facilitated that direction? I don't have to answer the question. If this is a significant criteria, which I would suggest that it is, the answer is no. So... The evidence speaks for itself. I think it was a poor thought process.

Now, the fact of the matter is that when it was called the Health Sciences—the name doesn't mean anything—the role that the then Health Sciences leadership had under Lyle French, and then [Neal] Vanselow, and briefly under Bob [Robert] Anderson was the intermediary between the Medical School and the Hospital, and the Medical School and the Board of Regents, and the Medical School and the Legislature. But the internal support systems were in the Medical School. The relationships that existed in very specific programs were interdisciplinary and that included Pharmacy and Nursing and Dentistry. So when we developed the Cancer Center, we had a dean's coordinating committee that included *those deans*. So you could do whatever you wanted *to do*. So, why not? It functioned beautifully.

When we developed the Biomedical Engineering Center, the same arrangement was created. I had a very, very good relationship with the then dean of Engineering. You didn't need all this administrative structure to do these things. You'd just *do them* and it worked out fabulously. All these other programs...the Immunology Center, the Neurosciences Program—these are things that I developed—the Biomedical Ethics

Center, Cancer Center, Biomedical Engineering, the Human Genetics Institute, all these things were done without adding any administrative structure, except to run those particular programs, but no other system that had to be put in place.

DT: Did that extra administrative structure come in after Robert Anderson...

DB: Frank Cerra.

[pause]

DB: Let me put it to you like this. You're asking my opinion so I'll give it to you. If you have a vision and perseverance, substantive content, and an argument and justification for pursuing entities, whatever it is, educational, research, service, it speaks for itself. You don't need this other overarching administrative structure to do it. Nobody is going to argue against it. If you want money from the University, sell it to the president.

At the time when we developed the Cancer Center, it went like this. I said to myself at the time when I became dean, "Why don't we have a formally established cancer center?" I know that John had, for example, a program in the genetics of cancer, Immunological Genetics of Cancer. That was done under Bob Good's initiative, incidentally, and John was in charge of that. I said to John, "Tell me. Where's the cancer center?" He said, "There is no cancer center." I said, "That's ridiculous. What are the problems?" "Well..." [sigh]

In fact, the concept of NCI [National Cancer Institute] sponsored cancer centers first arose, I'm not sure when exactly...in the 1970s. Apparently, Minnesota applied and didn't get it. My understanding, secondhand, is that there were *overt* conflicts between two of the people who were ostensibly the leaders. I assume John has told you this, hasn't he?

DT: Yes.

DB: Did he name the names?

DT: Charles McKhann and B.J. Kennedy.

DB: Yes, and Harry Jacobs. Yes. McKhann was supportive...a great guy.

Apparently, as I understand it, the conflicts that these other folks had was very overt and was detected by the site visitors. So they didn't fund it.

So I said to John, "That's for the birds. John, let's start something. Let's develop a cancer center. Seriously." At the time, he wasn't really appointed as head of anything. I just basically said, "John, you should be in charge of it. At least getting this thing started. Let's do it together." He agreed. I can't remember the exact chronology, but I asked Sy

[Seymour] Levitt, who was then head of Therapeutic Radiology, to have a search committee for who could be in charge of the cancer center and they suggested, and of course I agreed, that John should be it [the director].

So John and I organized the programmatic direction and the financial support. We needed to get a physical entity established. So we developed a justification for that. We didn't want *any* money from the University at the time, actually. But we needed the imprimatur of the University, so we went to then President of the University, Nils Hasselmo, who gave us a hard time. Why was that? Well, gosh, if they're going to put up a cancer center, this is going to somehow or other detract from monies for the rest of the University. Well, we kept on pursuing it. Finally, after considerable reluctance on his part to show the gumption of leadership, he agreed that, yes, the University of Minnesota should seek a cancer center. We got support from the Masons and developed under Win [Winston R.] Wallin's leadership a private enterprise to create the funding for the cancer center. That led to the development of the Cancer Center and there it is.

That was typical of the kind of hostility that existed across what we call Washington Avenue Syndrome. If the Medical School were to somehow or another thrive, this would *have* to be at the expense of the rest of the University. That's very typical of Minnesota. Minnesota is beautiful because it's very egalitarian, which is why you undoubtedly love to live here. But it also means that, God forbid, somebody should rise above somebody else. See?

But at any rate, we did it. That led to the Cancer Center.

The same situation evolved when it came to building the Basic Science Building, actually. At the time we became aware of the fact that there was federal money for new initiatives in science. It so happens that some of that kind of thing occurred with the support of the Department of Defense. We found out at the time that David Hamilton who was then the head of the Department of Anatomy, whom I searched for before I became dean... David and I found out about this funding mechanism and we said, "Well, shucks, we should apply for that. Why not? Everybody else is doing it in the country. Why shouldn't we?" You know, many universities were doing it. Well, Nils was against that. After all, that's not pure. But he finally succumbed and we got a \$10 million grant from the Department of Defense. That's a heck of a lot of good seed money. Therefore, we went to the Legislature and they funded the rest. We put Biomedical Engineering there, because we felt that that should be a motivating factor. The Minnesota...I can't think of the name of the organization, but, essentially, it was a high-tech conglomerate of private enterprises in the community...to support it, not financially, but just support the initiative. That led to the development of the building, which paradoxically has got Nils' name on it, which defies justification. I wasn't present at the time it was dedicated, but I understand that he said that it would never have occurred had I not begun the initiative. So, thank you. [chuckles]

What else? Let me think. Basically, that was it. It's sort of interesting, because it really meant if you have an idea and it makes sense and you can sell this idea to somebody else and get them to adopt it as their baby, too, then it happens. Perception is everything.

Way back before you were born—this is a story I love to tell—there was a very, very famous *Life Magazine* photograph at the end of the Second World War. In fact, there's a statue [Unconditional Surrender] of this photograph at San Diego [California] right near the aircraft carrier that's a museum [*USS Midway* Museum] now. It shows this picture of a sailor holding a nurse, kissing her. It was on State Street in Chicago. It was the end of the war. Everybody was celebrating. Well, there was the perception that sailors were flirts. It wasn't in the contemporary realm; it was not the sexual realm that you read about. They were flirts; so that was the perception. So there's this flirt with a nurse.

Perception is everything. And if you perceive that you want to be whatever you want to be, and if you can sell that perception to others, it has the force of logic and reason. I'm not sure...it doesn't mean you're impatient, because that almost implies that you're waiting for something to happen. You persist and it works, usually. You have to be fairly assertive in order to get the point across and, yes, some people won't like it, and some people will oppose you, and you may lose occasionally, but so what, if it's the right thing to do? That's always been my attitude.

DT: Emily is going to ask you a few more questions about the Cancer Center.

EH: After hearing about some of the administrative difficulties of getting the Cancer Center as a convincing idea, were there any interdepartmental issues in terms of moving from the "me" culture to a "we" together culture?

DB: As I recall, there were some. The first buy-in was Laboratory Medicine and Pathology, because by the intrinsic nature of cancer research, you realized that it isn't departmentally oriented. It's intellectually and scientifically oriented. So the environment that Ellis had propagated obviously encouraged the support of that interdisciplinary research. When it came to Lee Wattenberg, Matt Mescher, and Tucker LeBien, etcetera, it was very easy...and Leo Furcht himself. Leo's original research was in the interaction of biochemical components of cancer cells with their environment. That was Leo's thing. In fact, that was the basis for my initially having Leo in charge of Biomedical Engineering, because of the physical cellular interface, which was the basis of his research. He'd been into it and that was what led to that whole idea. There's always opposition to change and there's always opposition to losing control. That is to say, some people would be happier being in charge of less and less as long as they could be in charge of something. If you create what I refer to as the gray zone...

[break in the interview]

DB: ...which invariably necessitates entering into the unknown. There's a danger, because it means you don't know where it's going to go. Some people would rather know where it's going to go and stop it going anywhere that they don't know. Now,

that's human behavior, the so-called territorial imperative. The same thing applies to that. So the answer is, frankly, it was fairly mild. It was not a big deal. It was a deal. You had to sell people on the idea that they would all benefit from it.

At one time, Surgery wanted to be in charge of the Cancer Center, for example. But it didn't end up being a major problem. It was simply something that the logic of which had to be sold. See what I mean? That's the answer to your question. It was an obstacle but it was not difficult to, I won't say overcome it, to contend with and change it from an adversarial or doubtful relationship to a mutually advantageous relationship.

EH: It seems like from what I've heard from other people and from what you've said that on an individual basis, the research was already happening...

DB: Sure.

EH: ...in interdisciplinary spaces. It was just that there wasn't the administrative structure or the physical home.

DB: Right.

EH: So, it was already going on.

DB: A lot of it was going on.

Incidentally, one of the issues is not only encouraging and supporting and just doing the research, but in fundraising. For example, do you want support from the NCI or not? Do you want people in the community to support your cancer research? They don't give a hoot whether it's the department of potatoes or oranges. They want the product. The nature of the academic home or administrative home, frankly, is irrelevant. They don't know the difference. Why should they? Do you see what I mean? It's a matter of facilitation, not superimposition of a limiting structure. It's a matter of facilitation of improved product development.

EH: Can you talk a little bit more about choosing John Kersey to be director?

DB: Oh. [chuckles] I had known John for a long while. I knew about his research. I knew about his personality. I admire John. We've, subsequently, become, very, very good friends. We're having lunch tomorrow. We were good friends, but that was before we became such close friends. I simply admired the man; that's all. I knew what he was doing in research. I thought that the whole issue of inherited disorders and an immunological basis for cancer intrinsically, logically, intellectually was the right thing to do at the time. So to my way of thinking, that choice was logical. Then, obviously, when the time came to have the committee make a suggestion, they agreed. So, there it is.

EH: We speak frequently about the influence of the BMT [Bone Marrow Transplantation] Program on the structure that has developed in the Cancer Center.

DB: Well, Bob Good was responsible for bone marrow transplants. Many other people have become a part of the enterprise, now, of bone marrow transplants for all kinds of different reasons and different causes. Obviously, in some respects, bone marrow transplantation in a very, very limited and well-defined manner is a part of the cancer treatment. Multiple myeloma, for example, is a case in point. Certain forms of leukemia are cases in point. The biology of transplantation also has impacts on potential therapeutic approaches, not the bone marrow transplant per se, but the scientific immunological aspects of transplantation applications to the treatment of cancer. That's another one of those kinds of interdisciplinary activities. It's obviously got a bigger role to play in children, at least in Minnesota, than adults. But it's also a major part of metabolic disease treatments, for example.

I got involved with that personally because I've always been interested in bone biology and diseases. There's a rare, fairly rare, disorder called osteopetrosis. I was aware of some of the animal studies that had been done with models of osteopetrosis. So, I decided at the time that it would be worthwhile considering the possibility—it's a long story as to how you get there scientifically—of using cells derived from bone marrow to treat osteopetrosis. Osteopetrosis was, obviously, a disorder of the chemistry and removal of bone. There's a dynamic between new bone formation and old bone resorption. It was obvious that osteopetrosis was a disorder of bone resorption. So on the basis of studies that had been done by somebody in Baltimore with mice models of osteopetrosis where they were able to show that you can cause osteopetrosis or cure osteopetrosis by using the transplantation models, I said, "Well, let's apply this to children."

So Peter [F.] Coccia... He must have retired. Peter was in the BMT group here. We presented this idea scientifically and we said, "Let's see if we can find a patient where this is appropriate to consider," although it would be mainly experimental. There was a child that was referred to me. I saw this kid in consultation in Saint Paul and we said, "This child"—a girl—"would be an outstanding candidate." So at four months of age, she received a bone marrow transplant. We properly had done some studies, prior to the transplantation and then after transplantation and it cured her. It literally cured her and we were able to prove that the cells that were responsible for the curing and increased bone resorption were derived from the donor, because the donor was a male, so it has the Y chromosome. If you could identify the Y chromosome in the cells that replaced the non-functioning cells by biopsying the bone, pre and post, you could prove that they were derived from the donor. So we proved that this is the origin of the osteoclast, that the osteoclast which had been dysfunctional became properly functional after being replaced by normally functioning cells, and this child was cured. Cured! How about that? So that was the first metabolic bone disease that was treated by BMT. We got a wonderful paper in the journal [New England Journal of Medicine]. It was a very extraordinary experience.

EH: When did this happen?

[Approximately 1980]

[telephone rings – break in the interview]

EH: One other thing that you mentioned was Win Wallin and fundraising. Can you speak a little more on that?

DB: Well, gosh, how did we ever know that Win was interested in that? I don't remember, frankly. John may remember why we chose Win or asked Win to be in charge. I can't recall.

EH: From what I've seen in the Archives—I think you wanted to talk about this later, too—is the ALG [Antilymphocyte Globulin] scandal...

DB: Oh, that's another whole subject.

EH: ...and in redoing the AHC Win Wallin was called in. This was all happening sort of at the same time as the Cancer Center being developed. It seemed like he was around.

DB: It was coincidental. One thing had nothing to do with other.

EH: Okay.

DB: I can't recall exactly why John and I asked Win to do it. I really don't. Honest to goodness, I've really thought of that and I said, "I don't remember why," though he had a reputation as an effective community leader and a strong supporter of science. It had nothing to do with the ALG fiasco. That's another whole subject. We don't have time for that.

[laughter]

DB: That's a very interesting story about which I've written nothing and intend to write nothing and, therefore, will not go into details...

EH: Okay.

DB: ...because no one's going to gain from that discussion at this time. I talked to the president of the University about that because I thought he ought to have the background. I said to him at the time, "Beyond the record, I intend to say nothing more about it because no one's going to gain from it. It was a very unfortunate situation. It was not well handled. Everybody lost something as a result of it. Nothing was gained and justice was not served." The only thing I could say where justice was served is that, as you know, the federal legal proceedings found *no* guilt. All the other consequences were extraordinarily poorly handled and could have been handled very, very differently.

Justice would have been served and the outcome probably would have not resulted in what ended up to be hurtful to individuals as well as to the University.

It had nothing to do with Win Wallin in that respect. We asked Win because Win was, at that time, retired as the chairman of Medtronic. He, obviously, was a strong proponent of the University at the time. At any rate, Win agreed to do it and he was fabulous. He became a close friend of John [Najarian], actually, a really admired colleague. He and I had a wonderful relationship. Well after that when Win had his diagnosis of untreatable cancer, the University honored him, and he invited us to join in that ceremony. Do you know what the Yiddish word mensch means? It's a beautiful term. "Good person." If the world were full of the likes of him, we'd have a much, much better world. He was thoughtful. His leadership was extraordinarily effective. Every organization related to him thrived, including Medtronic, at the time. I remember a lot of one-to-one meetings that he and I had, not only he and I, but going to various other entities in the community. It was a spectacular experience.

EH: Do you think his involvement helped the Cancer Center become really a strong force in the community?

DB: Absolutely. No question about it. He was the kind of a person who, without any ego, deserved and received a lot of respect. He put a lot of time and energy behind it. The answer to your question is yes. He was definitely highly responsible for facilitating what resulted. You bet.

EH: I wondered about, since many people talked about the issues of town/gown and the University, how the Cancer Center really fared in that respect with community researchers and physicians.

DB: Basically, it's the following. It obviously had competition, town versus gown, and the town versus gown issue always comes up whether you're going to compete for patients and what constitutes identity and so forth and so on. The point that Win made on that particular venue was, listen, cancer research is done at the University. Others may very well provide excellent patient care in cancer, but when it comes to research innovation applied to cancer, that is the University's province. I was with him at a meeting with other heath care entities in the community where this issue of competition came up, and this is what he said at the time and laid it down. He had, at the time, a significant relationship with other health care entities in the community and he was willing to put his reputation on the line as, basically, as the line in the sand. So, that's the answer. Is that okay?

EH: Yes.

DB: He did it in a very calm but forceful fashion. There were no ifs, ands, or buts about it as far as he was concerned.

DT: That's really interesting that Wallin emphasized research and innovation as the province of the University, particularly in light of town/gown relations. I know that in the 1960s, at least, some of the antagonism from the town directed at the Medical School said that it was too research-oriented. It was too interested in specialization and not producing...

DB: But that's competition [whispered].

DT: Yes. That came down to competition...

DB: Sure. Look, if you look at back to Leonard's book in that particular realm... Remember what I said about the Mayo issue? It was all about competition. The whole schmeer was all about competition. It played itself out then and it plays itself out over and over and over again.

Actually, it was interesting at the time when John and I established the Cancer Center. We also met with the then cancer center director at Mayo, and we met him at the usual place in Cannon Falls. If you look at a map of Minnesota, Cannon Falls is halfway between Rochester and Minneapolis, literally, physically. So we met at a little restaurant and we had a conversation. At the time, we said, "Why don't Mayo and the University seek Legislative funds together?" He said, "Well, that's a great idea and we could do all the research you could imagine together, but if it has any impact on the perception of competition for patients, forget it." Now, that guy ultimately left Mayo. I don't remember his name, but John and I remember this conversation. It plays itself out over and over again.

DT: You mentioned, in talking about the Cancer Center, the tension actually within the University and the attitude of some in the University toward the Medical School, that kind of internal competition or some kind of antagonism. I'm wondering if you sensed there was any change in that attitude from when you first got here. Was it particularly potent in the 1980s or was it...?

DB: Well, it was very, very potent, actually. At the time when Ken [Kenneth] Keller became president, it was at its height, actually.

Ken, at the time, questioned, "Why should basic sciences be in the Medical School rather than having an All-University designation?" I remember giving this example. I said, "What is the name of the entity that provides the national funding for basic medical research?" I just asked the question. The best way to answer a question, incidentally, is to ask the right question. So I asked. He looked at me and he said, "Well, the National Institutes of Health." Ohhh. "What is the name of the entities within the NIH that actually implement the programs?" "Cancer Institute, the Heart Institute..." Oh. Now, do they do basic science research within those institutes? Of course. The answer is, the reason why congress funds the NIH is because of the logic of saying, "People want to be able to diagnose, treat, and cure cancer, heart disease, diabetes, arthritis, etcetera, etcetera. Right? So that's why they have these names associated with medicine. The

National Library of Medicine. It's not the Library of Basic Sciences. Right? Go back and look at the history of the NIH. There was a book of the history of the NIH. One of the founding heads of the NIH was named [Doctor] James [A.] Shannon. I remember the story. I think it's in that book that said—I'm paraphrasing—they apparently met in the auditorium at the NIH with people who work there. He said, "This is not the National Institutes of Basic Sciences. This is the National Institutes of Health." That's it. It doesn't mean to say that you don't do pure basic research for its own sake, but you're doing it with the logic of having it applied to health. That's the reason why it is supported. So that's the answer to your question. Yes, you should provide interdisciplinary research mechanisms and seek those out and so forth and so on. That's what it is and that's the answer. This conflict always existed. Ken's a logical man and he ultimately agreed, but then he got canned.

DT: What was Lyle French like as a vice president?

DB: Lyle was very supportive. When I was appointed dean, he had retired. So I never had that level of interaction. Lyle was a really neat guy. There were meetings I used to attend. I think it was because I used to attend meetings when Ellis couldn't go. There was something that Lyle...I don't remember what it was, what the nature of the interaction was... I remember the room but I don't remember the subject. Lyle made some kind of a statement on whatever it was. I remember saying to him, "I don't agree with you, Lyle," for whatever the reasons were. He looked at me sort of astounded, but we developed a very, very friendly relationship because he admired people who said what they thought. If it was reasonable, then so be it. That was the kind of a person he was. He was not ego-driven. He did not establish a large administrative mechanism. He was very facilitative. That's it. He didn't dominate. He was facilitative. That was my impression.

His successor, Neal Vanselow, pretty much operated in the same manner. Yes, at times, we would have differences of opinion. Sometimes, he didn't like what I said or I didn't like what he said, but we respected each other tremendously. He never said, "Look, I'm in charge," that type of thing.

I'm sure when you interviewed Cherie [R.] Perlmutter, I'll make a bet she said pretty much the same kind of thing. Am I right?

DT: I haven't interviewed her yet.

DB: You haven't?

DT: No. She's on my list, but I want to make sure I have a better understanding of all the health science units before I interview her, because she was so involved in all of them.

DB: Yes, right.

DT: Also, I've heard that she might be reluctant to talk to me. [chuckles] So I want to go in as prepared as...

DB: I have no idea. Sandy [Sandra Brown, Dr. Brown's wife] and I were very friendly with Cherie and her husband, Irv [Irving Perlmutter]. Irv died. Gosh, I don't know, maybe a year or something like that later, I said, "We haven't seen Cherie or heard from Cherie for a long time, so let's have lunch with her." So we had lunch, and I haven't see or heard from her since then.

DT: She's definitely on my... She's a very important person...

DB: I assume she's still living in Stillwater.

DT: That's what I've heard...

DB: I really don't know anything more than that.

DT: What led to your appointment as dean?

DB: God only knows.

[chuckles]

DB: I don't know. I told you what I had done. Whatever it is, people choose whoever they want to choose. I'm serious. I'm not giving you a lot of bull. Let the facts speak for themselves, whatever they were. I don't know. There it was.

DT: What led you to even accept the responsibility to go into administration?

DB: Because I admire this institution. When I entered, and I'm not exaggerating—this sounds ridiculous, but it's true—the entrance of the place, the old institution, it was the third floor of the Mayo Building, incidentally. That was the major entrance of the institution. I had this vague idea of what the place was all about, and I learned more and more about it. I became more than enamored, awed, by the institution. I literally became awed by the institution. My mindset was to be considered and so forth to do that type of thing was an extraordinary privilege. That's all there was to it. [sigh] I call it going with the flow, so to speak, but the difference between going with the flow and creating a flow are two different things. That was it. It was sort of like...yes, you think you know what's right and good, and if you have an opportunity to do something about it, you have one of two choices. You either don't, in which case, you ought to shut up, or if you want to do something to help and move whatever you think is right and good, then you put your energy behind it, and try to do your best. That's it. So that was it. I'm not kidding. It was as simple as that. It was crazy. Sandy didn't want me to do it. She didn't fight me about it, but she didn't want to get involved with what she considered was political Mickey Mouse and all that jazz. But I did it anyway and she supported me.

DT: Did you find that the faculty supported you, too, that there was a lot of support for your appointment?

DB: I guess. I found no negativism. As a matter of fact, when I resigned, which wasn't a happy situation by *any* stretch of the imagination, at first I was sort of like, what happens now, but I was welcomed *warmly* by the then heads of the two departments whom I had appointed in the first place, Leo Furcht and Al Michael...very, very warmly and by the faculty very, very warmly. I just was able to continue to pick up from where I'd left off, seriously, and ended up doing research. I ended up being officed again in Nephrology and did a lot of wonderful research with the guys in kidney.

In fact, Saturday night, there's a fundraiser for the Children's Initiative. Alfie [Alfred J.] Fish, who is one of the Nephrology people, and his wife Rikki [Enrica] always organize a table at [the University of Minnesota's] WineFest, and I'm sitting with the nephrologists, because it's our friendship.

I had a wonderful time afterwards. I didn't know what the heck was going to happen, but it did. I had a lot of good friends.

I had recruited Paul Robertson to be head of the Clinical Research Center. When I resigned, unfortunately things happened in the Department of Medicine that made Paul very, very unhappy, so he left. But before he left, he and his wife Peggy and Sandy and I became *very* close friends; a friendship which we continue to have. Paul moved to Seattle [Washington] and we have maintained this close friendship.

When he resigned, I became the director of the Clinical Research Center. That was a blast. I got involved, again, with NIH stuff, took over where Paul had been, actually. So I was involved nationally and did a lot of NIH study section work on the basis of other things I'd had done previously. As I indicated, I was a member of the Advisory Committee of Women's Research. So I had a wonderful post-dean career. It was very, very productive, very enjoyable, very uplifting.

I decided at the time that it was so wonderful and everything was very upbeat that that was the time to retire, actually. So I began to make the decision when I was sixty-six. I literally made it when I was sixty-seven and went on a two-year phased retirement.

I dumped...wrong word to use...actually turned over the directorship of the Clinical Research Center to Betsy [Elizabeth] Seaquist and Pediatric Endocrinology to Toni Moran. I was *really* pleased to be able to encourage and support these two women in their careers. They did wonderfully. Both of them are very successful.

I already had been teaching a course in lab medicine for the second-year medical students. I did a lot of that kind of stuff. That post-deanship period was really a blast, actually.

I had decided at the time, not only because of age but... This is not a lot of bull; this is the truth, too. I'd always done a lot of art just because I loved it. When I started this phased retirement thing, Sandy and I went on a tour of houses, this gala of houses on Lake Minnetonka as part of a fundraising thing just to see the houses. It was run by the Minnetonka Center for the Arts. We ended up, after this tour, back at the Minnesota Center for the Arts, and we were standing around. There was this paper brochure describing all the courses that they had at the Minnetonka Center for the Arts. By that time, I had decided to take off Mondays. Sandy said, "Why don't you see what's available on Mondays?" There was a class in figure sculpting. I didn't know anything about sculpting. 3D art is very different than 2D art. She said, "Why don't you enroll in that?" "Okay." So I did, and we're out ten years now, and I'm still doing it every Monday. There it is.

DT: What do you see as some of the kind of key things that you dealt with when you were dean?

DB: Do you mean other than ALG?

DT: [laughter] Other things you're willing to talk about.

DB: The first eight years were spectacular. The ninth year was hell.

DT: One of the things that you mentioned earlier, that it was under your deanship, you set up the Center for Bioethics.

DB: Yes, yes. I recruited Art [Arthur] Caplan. Did you ever listen to Art?

DT: Yes.

DB: You can't be interested in biomedical ethics and not listen to Art. If you listen to MPR [Minnesota Public Radio] and they say anything about biomedical ethics, the voice on the other end is Art. He's the most prominent bioethicist in that field. He's a character, but he's brilliant.

Why the devil did I do that? Well, it was the right and good thing to think about doing it. Right? So we established the justification for it. I guess we must have figured out how to scrounge around some bucks. Art, at the time, was in the Hastings Institute, which is someplace in New York [Garrison, NY], which was one of the first enterprises for ethics. We sought out Art, and he agreed to come. He and I had a blast. He had an office next to mine in Jackson Hall. We used to have a lot of fun interacting. He's a bubbly guy. He's very enthusiastic. What you see is what you get. I love a person like that. If you listen to Art, he's not glib. That's the way it is, you know. That's the kind of a guy he is. He left Minnesota to go to Penn [University of Pennsylvania] for two reasons. One reason is because his wife wanted to be closer to their family. The second reason was, at least if I take Art at face value, he said to me, "And because you're no longer dean."

Now, I'm not going to pit that against the fact that his wife wanted to be closer to their family.

[chuckles]

DB: At any rate, that led Art to leave Minnesota. That was the Biomedical Ethics Center

DT: In looking at some of the archival material, it seemed that the medical students had been kind of agitating for more ethics in their education since at least the 1970s.

DB: I'm sure that's true. It was the logic of that. It was not only at that level. Medical care... Let me rephrase. The organization of medical care and the perception of medical care changed in about 1965 or 1966. There was an article in *Life Magazine*... I forget your first name.

EH: Emily.

DB: Emily, thank you. I'm sorry.

EH: That's okay.

DB: Emily, you probably don't even know about this. At one time *Life Magazine* was *the...* It was like *Time* and *Newsweek*. Everybody read it. Well, *Life Magazine* went on an exposé at the time, and basically started questioning whether MDs [medical doctors] have all the answers and authority. After all, MDs by that time were the pinnacle of medical decisions. At least that was the perception. They began to question it. Were some decisions made in healthcare the right decisions? Was everything done properly, etcetera, etcetera? So they began to question the implicit authority of MDs. Well, it was the right question. So things began to percolate about that time and that developed more and more. That, basically, led to the concept that evolved and was called biomedical ethics. It evolved because there were logical questions to ask. It actually occurred before all the issues of healthcare cost organizations and all that jazz. It was just a logical thing to ask.

Other things came up that added to that. The Tuskegee [Institute] syphilis experiment, for example. I can't think of the guy's name [Saul Krugman and Robert W. McCollum]; I always forget his name. There was a study done with hepatitis virus.

DT: Was that the Willowbrook [State School, Staten Island, New York] studies?

DB: Yes, things that we nowadays would say, "Oh, my god!" We wouldn't consider them.

One of the initiatives that I undertook, I'll never forget. It was magnificent. It was in some organized fashion looking at the question about what was done under the guise of

research by the Nazis in the Second World War and the organized conflicts on that. I'll never forget it. Art had already been appointed as Center director. He organized an extraordinary symposium on Nazi medical research.

All these things in the aggregate sort of added up. See what I mean? I might take credit for saying, "I organized the Biomedical Ethics Center. I didn't organize the Biomedical Ethics Center. We organized the Biomedical Ethics Center, the societal "we." Do you see what I mean? It's different. There's no such thing as something really original. Everything is derivative. Even [Albert] Einstein's work is derivative, because he was asking questions that nobody had answered in a manner that nobody previously could have thought of. Right? But it was the questions, you see, that he recognized and that he began to seek the answer to. I didn't suddenly think about ethics because nobody else had. That's ridiculous.

Like the neurosciences program... Yes, I began the neurosciences program. Bob [Robert P.] Elde, who is the dean of Biological Sciences—at least he was a few years ago—... Is he still?

DT: I don't know.

DB: Anyway, he was. He was then in the Department of Anatomy, and he was interested in neurosciences. I remember asking Bob to be the head and to develop a neurosciences program, which ultimately ended up as the Neurosciences Department. But it wasn't that I had thought about that. Heck, the study of the brain, etcetera? I didn't think about that. But it seemed a logical and good thing to pursue. Right? So that's what happened.

DT: During your deanship, how much collaboration or discussion did you have with the other deans of the health sciences like Nursing, Public Health, Dentistry?

DB: Invariably, in the context of the development of these various programs is the answer to your question. It was not always organization for organization's sake. It was with the programs. Now, I can't speak for Lyle but under Neal Vanselow and then Bob Anderson, there used to be retreats of the health sciences deans. We had a lot of interpersonal interaction along those lines so we got to know each other and each other's programs and interests. To use a metaphor, if you don't have a good seedbed, it's very unlikely the seeds will implant. So the logic was to create the knowledge of what was available, the resources that were available, the people that were available and, then, you could basically, when you came up with ideas, see how you could use them. That was the logic behind that approach.

DT: Was there any particular health science unit that you felt the Medical School was collaborating with more than any other? Were there particular relationships?

DB: Well, probably Public Health. The then dean of the School of Public Health and I had a very good relationship. That led to the development of the combined MD/MS, the

master's program in public health and combined MD program. Sure, why shouldn't we do it? It didn't require any super organization. There was the logical place to have the master's degree in public health. Some MDs would be interested in public health. Right? So, you do it.

DT: Was that when Robert Kane was dean?

DB: Bob Kane? Maybe so. [pause] I think so. He was a spark plug, as you know. If Bob had continued as dean of the School of Public Health—obviously, he was interested in geriatrics—then something would have evolved to encourage more in both research and education in geriatrics, as far as I'd be concerned. He was dean for three years, I think. He was too much of a spark plug for the faculty in the School of Public Health. [chuckles]

DT: When you were dean, did you often have to go before the State Legislature?

DB: We did. I remember doing it in two contexts. One of them was to build the Basic Science Building. The answer to that was, "Yes"—committees, actually. The other was only in response to something. When MNCare [MinnesotaCare] first was being considered, there was a committee that was appointed in the community. I'm not sure who was on it, except the physician who became in charge of the...I always forget the name of the big medical care delivery system in California.

DT: Oh, Kaiser Permanente.

DB: Yes. I can't think of his name. He was, at that time, in charge of Group Health. He was in charge of Group Health at the time. I remember he was on the committee. I remember testifying to the committee. He said, "Research leads to increased costs. One of the problems with healthcare costs right now is research." I said to him at the time during the testimony—this was an off the cuff type of response—"If you took that point of view, then you would still be doing radical mastectomies on women for breast cancer. You'd remove the testicles of every man who's got prostate cancer. You would withhold fluids from infants who have respiratory distress syndrome. You would not have much thought process about the use of antibiotics prior to, during, and after surgery. Is that what you really seek by stopping research?" I'll never forget that. So the answer to that is the context of that. He went on to higher things. He left Group Health and now he's at Kaiser in California.

George...

DT: George [C.] Halvorson?

DB: Halvorson.

[break in the interview as Sandra Brown comes in –extraneous conversation]

DT: How did you find, in general, the State Legislature's attitude toward the Medical School?

DB: They didn't have any specific attitude toward the Medical School. The lobbying, for the most part, was done by the University. I think it still occurs in that manner. In fact, there's a precept, generally speaking, that individual academic units shouldn't lobby specifically for operational funding. As a matter of fact, you shouldn't even lobby for facility funding, except in support of the University's initiative. That is to say, they'll have a shopping list, so to speak, and you'll be asked to respond.

In other places throughout the country that is not the case. The best example of that *not* being the case is Oregon. What do they call it? The University of Health Sciences, I think. Isn't that right, Dominique?

DT: Oregon Health and Science University.

DB: Something like that. I don't know enough about the details of the organizational relationships that medical schools and universities have with each other in terms of lobbying within their communities. I'm not sure. The best place that I can think of to ask that question would be with regard to California. I don't know to what degree Mark Yudof controls or doesn't control or thinks he controls or doesn't control the various branches of the University of California medical schools. He may think he controls it and maybe he does. I really don't know, but I wonder to what degree UCLA [University of California-Los Angeles]... UCSF...do you know about these? The UCSF, the University of California-San Francisco, Medical School used to be actually a part of the Berkeley campus, but it was logical that the medical school should locate in San Francisco. So at the time when this change in the organization of healthcare educational facilities was occurring, a decision was made—a good one—to have the medical school located in San Francisco. I don't know to what degree they do or don't act independently of the whole university. I suspect that they act quite independently, but I don't know the details.

So the answer to your question is by and large respectful, but I think it's still pretty much done at the level of the University.

DT: I know during Lyle French's tenure as dean and vice president that he went before the Legislature.

DB: That's right.

DT: Do you have any sense whether Vanselow also mediated those relationships?

DB: Yes, he did. Yes.

DT: I'm wondering if you have any perspective on how the arrival of health maintenance organizations [HMOs] in Minnesota influenced things at the Medical School.

DB: Well, the terminology is facetious because *none* of them have ever operated on the basis of anything to do with maintaining health. They were simply using marketable terminology. In fact, Dominique, the Group Health terminology was actually begun by Maurice Visscher. Did you know that?

DT: I think John Diehl might have recently told me that.

DB: Yes, Maurice Visscher's idea was something to do with developing this organizational thing, the HMOs. Because he, incidentally, would have provided a spectacular justification, wouldn't it?

I don't know how much you want to get into it. Let's see. Which newspaper was it? One of the newspapers, either yesterday or the day before, I don't remember which it is, had an article on the prevalence of obesity in the United States. Did you see it? It's an important article. Although the data is a little outdated, it talked about the evolution of obesity in the American population. Projecting it forward, if you took the data that was described for the decades that they [discussed in the article] and you figured out the cost factor, you'd end up with a *huge* fraction of the total healthcare costs in the United States attributable to obesity.

That gets into the whole realm of the Affordable Care Act [ACA]. I don't give a hoot who hears me saying this. Of course, the Republicans are against it. Paradoxically, does that mean to say that you don't want to prevent the diseases that you're complaining about that cost a lot of money to take care of? Really? Oh, isn't that novel? Wouldn't that, incidentally, make a good sales pitch for the ACA? Why in heaven's name [President Barack] Obama and all our local senators haven't used that... It drives me *nuts*. In fact, although I admired the man immensely, when he gave that speech three years ago to Congress, he blew it. At that time, the only reference he made to this subject was the distinction between the red pill and the blue pill. What the heck does that mean? What he should have done is he should have put his academic hat on. He should have had a slide show. Yes, in Congress.

DT: [chuckles]

DB: And he should have passed out the slides in hardcopy, and he should have asked and answered a whole bunch of questions, which anybody should have known would be there. And this is one of them. Right? So now, hidden, immersed in what Republicans have successfully said is obscure, is the prevention of disease. That's what this article has reference to in this one particular part.

So HMOs? That's ridiculous. It's simply an administrative organization for marketing. Has it had an impact? *Sure*. It goes back to the *same* situation that occurred in the middle of the twentieth century. How do you package healthcare administration and healthcare delivery and finance mechanisms? It's all the same thing. There's no difference. It's just called something different.

So how does it impact on the University? It impacts it tremendously. There's obviously overlapping and conflicting marketing tools that are used by various entities in the organization, administration, and finances of these various health care delivery mechanisms, and it impacts the University because the University has to be a part of that.

You can look it up. There's a *New England Journal of Medicine* article—I've lost track of the time—let's say twenty something years ago, that talked about the competitive marketplace. In fact, I think it's part of the title of the article. It referred to the University of Minnesota, actually, and questioned whether or not the University of Minnesota would be able to continue to compete in a competitive marketplace given the fact that it's an academic center. The answer to your question is there.

Then there was an issue of JAMA [Journal of American Medical Association] several years ago that had two articles relevant to the subject. One of the articles talked about the University of Pennsylvania and Penn State and talked about their organizational relationships competing for patient care. Then, there was another article in that same issue of JAMA that had something to do on a relatively related subject in terms of, I think, primary care referrals or some subject of that sort. It was either in May or June of whatever that calendar year was in JAMA.

I remember having this discussion with Bob [President Robert] Bruiniks. Bob didn't know from beans about the whole medical sphere. He, basically, promulgated all the authority to Frank [Cerra]. He didn't understand and this whole realm—the relationships of an academic medical center in a competitive marketplace. I referred him to both the Leonard Wilson chapter and this *JAMA* issue as reference points.

DT: I'll definitely go and look these articles up.

In 1985, the physicians established the University of Minnesota Clinical Associates.

DB: Yes.

DT: Can you comment on that at all?

DB: Sure. Before that, as I indicated the private practice components were totally individual departments. The barriers were impenetrable steel barriers. There were even components within individual departments where they would compete with each other and didn't even join together within a department. The best example, the lousiest case, was Neurology at the time. A whole bunch of people in Neurology were competing with each other. That's crazy. Obviously, if you go into this competitive marketplace... Hey guys, wake up. Some people would rather be in charge of less and less than have to relate to a broad organization in which one could lose autonomy. That's the answer to that. It was no longer a viable mechanism. That was the initial motivation for creating the University of Minnesota Clinical Associates.

DT: Did you have a primary role in setting that up?

DB: No. No, not really. I encouraged it. It had to come from within the departments to agree to do this. Roby was very facilitative about that, in bringing about that organization.

DT: Roby Thompson?

DB: Yes.

DT: This was, I guess, right at the end of your tenure as dean. The University of Minnesota health system joined with the Clinical Associates to make an integrated health system?

DB: After Bob Dickler left to become a member of the executive staff of AAMC, Greg [Gregory] Hart became the director of the University Hospital at the time. I need to think through this a little bit. The vehicle through which they were going to operate, generally speaking, was the University Hospital. So they developed I don't think it was all that much of a formal administrative structure as much as it was an implicit relationship.

That's not shocking, incidentally. I don't know if you know it. Did you know that for decades, the relationship that the Mayo Clinic had with its two respective hospitals, Saint Mary's and whatever the other one is [Olmsted Community Hospital]—I can't think of it—was a handshake relationship that the Mayo Brothers [William and Charles] had with the nuns [Sisters of Saint Francis] who were in charge of Saint Mary's? There was no contract. Isn't that interesting? Sometimes, things work well. I'm not saying this is necessarily applicable to today's world, but it's a good starting point. It's one thing to write a contract after you've shaken hands and agreed to the principles. It's another thing to have lawyers doing the contract.

My recollection is that it was sort of an implicit relationship; that is to say, they knew that they needed each other, so I think that's what happened, as I recall.

It was no different than the relationship that Bob Dickler and I developed between the Hospital and the Medical School. Prior to that, the dean of the Medical School had no relationship *whatsoever* with the Hospital, nothing, zero. Period. In fact, when I became dean, I was shocked to find that the predecessor deans never insisted upon a relationship with the Hospital. There was nothing. At the time when they established a Board of Governors at the University Hospital, I wasn't on that. When I became dean that was one of the conditions that I set. This was ridiculous.

DT: The department chairs were the clinical chiefs?

DB: Yes.

DT: They had their relationship with the Hospital, but the Dean...?

DB: But even that was sort of like a... Again, there was nothing in writing about that. If you don't have anything in writing, then you don't have to... [chuckles] You can do whatever you want, which was, at the time, their desire. It didn't make any sense. But that's the way it was.

DT: I realize you've kind of said all you're willing to say about the ALG situation. If there's anything more you want to elaborate on then that would be great.

DB: I think I gave you the bottom line, actually. If I had known... Let me rephrase this. An ounce of prevention is worth a pound of cure. If one knew what was learned subsequently, they probably would have been effective in preventing the disease in the first place. I knew nothing about the background of this situation and had no reason to doubt that everything was okay and neither did anybody else, neither did Nils Hasselmo or Lyle French. But things were not okay. Unfortunately, things got out of hand and they got out of hand because there was a big exposé on the part of the newspaper. To go back and to look at the newspapers, the Star Tribune, in 1992... The University had just completed a capital fundraising drive. One of the columnists, Joe Rigert, basically decided, for reasons that one could infer but nobody really knows the facts... Why would he want to take off after the University? But there must have been something fishy about the fundraising part. Right? Not really—but there must have been. So he kept on looking. Then, he decided...and I'm not really sure what motivated him to do it. He wrote this big series of articles on the Medical School and he took off after the private practice. He took after Barry Garfinkel in Child Psychiatry. He took off after ALG and Najarian. I don't remember the fourth thing, but there were four. The University, unfortunately, reacted, "Oh, my god! What's happening?" Do you know what I mean? They hired [a prosecutor] to do an investigation and that's it. It was adversarial rather than advocacy. Do you see what I mean? It wasn't that everything was done right in the first place. But then to have to have the outcome that it had... It could have been done justly and fairly, and it would have had a different consequence. I haven't seen John in several years, but I did have this casual conversation with him and John said, "That's water under the dam. We just have to go beyond that"—which is true. But it's very, very sad, very unfortunate, and it should have been handled differently with a different outcome.

DT: I'm glad that you...

DB: Incidentally, Leonard wrote an outstanding article in the *Annals of Surgery*. Did you know that?

DT: I haven't seen it.

DB: Really?

DT: No.

DB: Ha. Ha. It's your own department!

DT: [chuckles]

DB: Hey, really? Listen. There you go. Leonard was the author. I'll bet you can find it in your own office, for crying out loud.

DT: I probably can. [laughter]

DB: I think it was the *Annals of Surgery*. I don't think it was the *Archives of Surgery*. It was one or the other. [correctly in the *Archives of History*, "The Crime of Saving Lives: the FDA, John Najarian, and Minnesota ALG" (1995) 130: 1035-1039]

DT: I'll find it. I can ask Leonard myself...shamefully.

DB: He'll tell you about it. Yes, read the article. It was very reasonable. It was well thought out. Leonard said it right. You read it and go from there.

DT: One of the questions that I'm glad that you've just kind of addressed, or implicitly addressed, is trying to understand why the University reacted the way it did and that larger context of the media attention.

DB: You know, it's imponderable.

[pause] There were other things that were happening at the time, actually, at a totally different level that... Off the record.

[break in the interview]

DT: You already mentioned about your decision to resign from being dean. I wonder if there's anything more you wanted to say about your decision to resign.

DB: Well, my decision to resign was under an extraordinary amount of pressure. As I indicated to you, it was probably the worst year of my life, literally...Sandy's and my worst period of time. There was a huge amount of pressure. The U.S. attorney had requested, and obviously got it, all of our calendars because we must have done something wrong, which was not the case. We were building this house, literally, nineteen years ago. My mother was in the process of dying. One of our cats died. [chuckles] It was a lousy time. And this environment at the University occurred. See what I mean? After all, I was in charge of the Medical School, so one thing logically leads to the other. Yes? No? What the heck was I supposed to do? Bob Anderson, who was the v.p. [vice president] for the health sciences, got fed up with the whole thing and he quit. So who else is there? *Me*. At the time, it was very depressing. I really didn't have any alternative because everybody was against the Medical School, against the private practice plan, against the heads of the departments, etcetera, etcetera, etcetera. So

what was I going to do? At the time, my friends Leo [Furcht] and Al [Michael] said, "It's not worth it, Dave. Come back." So I did.

DT: And things got better.

DB: And things got better.

[chuckles]

DB: It was better than only the absence of the negative, because it became very, very positive. It was very enjoyable, very productive. I was back doing what I had always done, and it was extraordinary.

DT: [speaking to Emily Hagens] Do you have any more questions?

We've covered a lot of ground. I wonder if there's anything else that you'd like to say.

DB: No. I just hope to see, eventually, whatever you'll produce.

DT: Yes, you will.

[laughter]

DT: Thank you so much.

DB: You're welcome.

[End of the Interview]

Transcribed by Beverly Hermes

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