Robert K. Anderson, DVM, MPHNarrator

Dominique A. Tobbell, Ph.D. Interviewer

ACADEMIC HEALTH CENTER ORAL HISTORY PROJECT

University of Minnesota

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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

Robert K. Anderson was born in Colorado in 1922. He received his DVM from Colorado State University in 1944 and an MPH from the University of Michigan in 1950. He served in the military from 1944 to 1946. He practiced veterinary medicine in 1944 and 1946, before and after serving in the military. He worked as Chief of Veterinary Public Health Services for the City of Denver from 1947 to 1956 and as an instructor at the University of Colorado Medical School from 1950 to 1956. In 1956, he came to the University of Minnesota with a joint appointment as a faculty member in the School of Veterinary Medicine and the School of Public Health. He served as the Associate Dean of the College of Veterinary Medicine from 1965 to 1971. With Ruth Foster, he invented the Gentle Leader. Headcollar in 1982. In his dual roles in Veterinary Medicine and Public Health, Anderson co-founded and served as director of CENSHARE, the Center to Study Human-Animal Relationships and Environments, one of the first centers to train and promote companion animal therapy. He retired in 1985. He served as a professor emeritus in both the School of Public Health and the College of Veterinary Medicine until his death on October 12, 2012.

Interview Abstract

In the first interview, Robert K. Anderson begins by describing his background, including his childhood, education, his service in the military, his early career, and his reasons for pursuing degrees in veterinary medicine and public health. He discusses his experiences on the faculty of the University of Colorado Medical School, in private practice, as a faculty member of the University of Minnesota, and as an epidemiology teacher for the Pan American Health Organization. He goes on to describe the following: One Health and comparative health; collaboration among the different health science units at the University; his research on brucellosis; his work with rabies for Veterinary Public Health in Denver; the College of Veterinary Medicine's (CVM) accreditation; the relationship among Veterinary Medicine, UMN central administration, and the Legislature; comparative funding for the CVM and the School of Public Health; and the CVM's relationship with industry and the USDA. Concerning education within the CVM, Anderson discusses his teaching, the growth of veterinary manpower, women in veterinary medicine, and the recruiting of minority students. He then explores the merging of the CVM with the health sciences and his research on radiation and bovine leukemia. Later in his career, Anderson studied psychology, which led to his interest in human-animal bonds and animal behavior. He considers this work as foundational to creating the Gentle Leader[®], reforming his beliefs about dog training, and prompting the establishment of the American College of Veterinary Behaviors, the Delta Society, and the Center to Study Human Animal Relationships and Environments. Among the figures he discusses in his interview, Anderson is particularly attentive to the roles of William T.S. Thorp, Joseph Massey, and Sidney Ewing in his career.

In the second interview, Robert K. Anderson and David Garloff focus most of their discussion on the Center to Study Human-Animal Bonds and Environments (CENSHARE), including its establishment, research, interactions with other university

centers, and programs doing work on human-animal bonds, funding, educational programs and courses, its products and programs, many of the people and volunteers involved over the years, and other topics. They also discuss Temple Grandin, the Gentle Leader[®], NIH funding of veterinary medicine studies, the Delta Society, Helping Paws, Anderson's work as Chief of Veterinary Public Health Services for Denver, and disease transmission between animals and humans.

Interview with Doctor Robert K. Anderson

Interviewed by Dominique Tobbell, Oral Historian

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

Interviewed at 1666 Coffman Street Saint Paul, Minnesota

Interviewed on May 31, 2011

Robert Anderson - RA Dominique Tobbell - DT

DT: This is Dominique Tobbell, and I'm here with Doctor Robert K. Anderson at 1666 Coffman Street [Saint Paul, Minnesota]. It is May 31, 2011.

Thank you for having me here today.

To get us started, could you say a little bit about where you were born and raised and how you became a veterinarian?

RA: I was born in Colorado in 1922 and lived in Fort Collins, Colorado, until I finished at Colorado State University with my Doctor of Veterinary Medicine degree. I lived in town and, then, on a farm and raised dairy cattle and had a herd of forty Guernsey cattle and sold Golden Guernsey milk, and, actually, had show cattle and had grand champions at the Colorado State Fair in both the mature animals and in the young animals. We had five-gaited and three-gaited American saddle horses, and we had a lot of pets, so that I grew up with animals and pets, which was one factor that helped me. And we had a friend who had graduated as a veterinarian and went to practice in Kansas City. He encouraged me to come down there and spend a summer with him and I did. Then, when I came back home, my family and my friends and one of my mentors, Doctor Lowell, who was a physician, actually encouraged me apply for the veterinary medicine school at Colorado State University. I applied and was accepted and I received my DVM, Doctor of Veterinary Medicine, degree in 1944 at the age of twenty-one. We went through veterinary school very, very quickly because it was wartime, so it only took us a short time to go through.

DT: Did you serve in the war [World War II]?

RA: Yes, I went into the Navy and they sent me to epidemiology school at the National Naval Medical Center in Bethesda, Maryland. That's how I became interested in public health. My instructors were from Johns Hopkins [Bloomberg] School of Public Health, and Yale and Harvard Schools of Public Health, and they talked to me about public health. When I finished the school at Bethesda, I was assigned to the Great Lakes Naval Base [Great Lakes, Illinois] to the epidemiology unit and got to work there until I was released or discharged from the Navy in 1946.

Then, I had a career as a practitioner for about nine months. That didn't work.

[chuckles]

RA: So, I went to work for the U.S. Department of Agriculture [USDA] for about six months, and, then, this opening came with the Department of Health and Hospitals in Denver, Colorado. It was a revitalized department where nearly everyone in the department, in terms of professionals, had an MPH [Master of Public Health]. The director, commissioner, was a professor of preventive medicine and public health at the University of Colorado. They sent me back to the University of Michigan where I got my graduate degree in public health. When I came back to Denver in 1950, I received an appointment in the University of Colorado Medical School as an instructor in the medical school from 1950 to 1956.

DT: What were you teaching then?

RA: I was teaching preventive medicine. Actually, it was primarily on what I like to call One Health, because it was the rule of animals and people together in the environment and the diseases transmitted between animals and people and the role of the environment. For example, insects, mosquitoes, and so on...like we now have West Nile virus and many other things that we worry about. In those days, one that people didn't understand was what they called valley fever in Arizona, which was transmitted by arthropods.

When I first went into public health, there was a book called *Diseases Transmitted between Animals and People*. It listed 43 diseases. Today, most of the new diseases that we discover are transmitted among animals and people. We now have something like 240 of those diseases. We are recognizing many more and we now understand that everything is comparative.

We did a conference back in 1951 or 1952 at the University of Michigan in which we talked about comparative medicine and one medicine and one health and one public health, because this was held at the University of Michigan School of Public Health, which is where I received my MPH. As a result, I have been a strong advocate for the last sixty years for One Health/One Medicine. Fortunately, as you'll see from the DVD [digital videodisk - *Salute to R.K. Anderson*, February 5, 2009], that's now recognized not only in this University but in many others around the country, and there is a national

organization [American Veterinary Medical Association] now headed by Doctor [Roger] Mahr, M-a-h-r, who is a veterinarian. They have an office now at Iowa State University. It is sponsored by the American Medical Association, the American Veterinary Medical Association, and other medical and public health groups around the country, because people are beginning to recognize that it is One Medicine/One Health, and we're all in this together. Particularly now that we have such a warm human/animal bond with our pets and the fact that we like to go out in the wilderness and hike and do all these things, we're exposed both at home and in our recreation in the outdoors. So, this is why so many of the zoonoses are now being recognized where we didn't get exposure and recognition previously, like Q [Query] fever, which is in California, and we have tick fever in Minnesota. That is very prevalent and caused by deer ticks. It's amazing how wherever we go we're exposed...

[chuckles]

RA: ...to zoonoses or comparative medical.

The other thing I'd like to mention is that at the Veterinary School and the School of Medicine at Minnesota, we have close cooperation with researchers who are looking at animal models of human disease, particularly in cancer with the cancer group in the Medical School where our veterinarians are working very closely to develop modes of treatment and modes of prevention. It's a great way to be. We're so fortunate to be here at the University of Minnesota where we have all the schools of the health sciences.

That's why I came here, because we had a School of Public Health, School of Medicine, School of Dentistry, School of Nursing, School of Pharmacy, all of them in the health sciences. I said, "This is where I'd like to be, where I can have interaction with all my colleagues in the health sciences and we can work together for the benefit of animals and people."

DT: Do you think that emphasis on One Health was something that really emerged in the 1950s, that you were essentially involved in?

RA: Yes. There was a conference on it and I will try and find the proceedings. I'll try and find that for you.

DT: Okay.

RA: That was the first concept that I know of. Now, I would say that we actually had more before that, because if you look at the history of medicine, some of our pioneers talked about comparative medicine and one health and one medicine. So we were not the first when we held the conference at the University of Michigan; we were just following up the pioneers who were the early, early physicians. I think the first time would have been in England, probably. Well, think of [Louis] Pasteur in France. Think of smallpox...

DT: [Edward] Jenner,

RA: ...Jenner in England and others where they found that these were diseases transmitted between animals and people. They became convinced that we had one world, one health, one medicine...one biology. [chuckles]

DT: I think you'd be interested in my colleague, Susan Jones. She just published a book in the last year on anthrax...

RA: Ahhhh [whispered]. .

DT: ...Death in a Small Package [: a Short History of Anthrax, Johns Hopkins University Press, 2010]. She's a veterinarian and a historian. She talks exactly about this, how anthrax kind of moved from an agricultural disease to an industrial disease and, eventually, to a biological weapon, just that notion that it was a disease experienced by both animals and humans.

RA: Exactly, and it was one of the best examples, and we still have it, unfortunately, because the anthrax organism, *bacillus* [anthracis], can survive in the environment for many years. We have examples in South Dakota here and North Dakota and Western Minnesota where we still have animals, cattle, becoming infected with anthrax, even though we have all this knowledge. It was in a dormant state in the soil and with the proper moisture and temperature, it flourished, and when the cattle and sheep ate the grass too closely, they picked up the anthrax *bacillus*.

DT: I'll send you the information about my colleague's book. I think you might enjoy it.

RA: I'd love to meet her.

DT: Yes. She's wonderful. I'll gladly introduce you.

RA: Good. I'd love to take both of you to lunch.

DT: Oh, that sounds great! I know that this is exactly...

RA: Then, we could just free flow.

DT: Yes, exactly. I'll make that happen then.

RA: Will you?

DT: Yes.

RA: All right. Please.

DT: Absolutely.

I'm curious about the Navy. When you joined the Navy, they saw you were a veterinarian and they...

RA: They wondered why I was there. I said because when I graduated that year, I had a commission in the Army as a Second Lieutenant in the Medical Corps. Unfortunately—that was 1944—the Army, at that point, didn't need any more veterinarians, so they suggested we go out and do large animal practice. I said, "No. I want to go in the service. I've always been interested in what they do in the Navy and how a veterinarian could fit into the Navy." [chuckles] Fortunately, after I got through the preliminary training, they said, "Since you're a veterinarian, we're going to send you to school back at Bethesda," and they let me pick epidemiology. That's where I went and I spent time in epidemiology school. Now, of course, I think, we only went eight months or nine months, something like that. It was not a long course.

[chuckles]

RA: It was good and it was, also, laboratory oriented, which was good for me, because it gave me more laboratory skills.

The Navy was good to me. Then, they sent me to the Great Lakes Training Station. There, we had an individual who was really interested in trying to develop a cure or an antibiotic for not syphilis, but the other one that is so prevalent...

DT: Gonorrhea.

RA: ...gonorrhea. He thought that he had a compound that would do that. We had a chemist who was in the Navy with me in that unit. He was a biochemist, who later on has won the Nobel Prize.

DT: Oh, really?

RA: Doctor Paul Boyer.

DT: Ohh! Really?

RA: He actually was here at the University of Minnesota as a professor in biochemistry when I came, so I consulted with him. I said, "Should I come to Minnesota?" [chuckles] He said, "Yes." He thought the University of Minnesota was great. But, unfortunately, the University of California had more money and so forth and when they looked at his research, they said, "This man is going to win a Nobel Prize." So they hired him and took him to the University of California in Los Angeles. But, he was a fine colleague and I learned a lot from him.

That led me to work later with a biochemist [R. Jenness] and I actually published papers with him in *Science* and the *New England Journal of Medicine* and other prestigious

publications. [Such as Reddin, J. L., R. K. Anderson, R. Jenness, and Wesley W. Spink. "Significance of 7S and macroglobulin brucella agglutinins in human brucellosis." *New England Journal of Medicine* 272, no. 24 (1965): 1263-1268. And Anderson, R. K., Robert Jenness, Helene P. Brumfield, and Patricia Gough. "Brucella-Agglutinating Antibodies: Relation of Mercaptoethanol Stability to Complement Fixation." *Science (New York, NY)* 143, no. 3612 (1964): 1334.] I felt very good about having that background that I knew. Biochemists and veterinarians can work together and can come up with basic research that will benefit everyone.

DT: You said that you were in private practice for a few months, but it didn't work out. Did you not like it or...?

RA: Well, there are a number of factors involved. Let's just say that I went to work with a friend in Kansas City. The big factor was that he was so good that the University of Missouri was starting a new veterinary school and they hired him to be their professor of medicine and director of their clinical program. So he was going to leave. He wanted me to buy his practice, and I said, "No. I'm going to go back to Colorado." He said, "Fine." He sold his practice and went to the University of Missouri as a professor. So I had good instruction

[laughter]

DT: It certainly sounds like it.

RA: A good colleague. All my life, I've been very fortunate to be with excellent, excellent colleagues.

DT: Did you ever miss the private practice or clinical aspects when you decided to go into academia?

RA: No, I didn't, because I had all kinds of good friends and colleagues who could give me any answers or work with me to help me. My research, actually, was not in small animals, which is where my practice would have been in Kansas City, but was in large animals, because I became one of the four or five people in brucellosis research...that was brucellosis in cattle. So for twenty years, from 1956 till about 1976, 1980, I did research on brucellosis, and I developed or invented tests for that that were badly needed. We used a vaccine that was a live attenuated vaccine and it actually would cause antibodies in the calves that we vaccinated. It wouldn't cause disease, but it caused antibodies that actually couldn't differentiate from antibodies produced by the living organism that caused the disease. Since I used that as the test for brucellosis infection and actual disease in cattle, for a number of years, we were slaughtering animals because we called them infected, when, actually, they were vaccinal reactions.

It gave me a chance to work with Doctor Wesley Spink, who was a professor of medicine in the Medical School. After we published in *Science*, he called me and said, "R.K., I have a lot of serums banked from a study I did with prisoners at the Stillwater

[Minnesota] Prison fifteen, twenty years ago where we actually inoculated them with *brucella abortus* vaccine to see how they would respond. We were able to get good responses in them, but I'd like to know if you could differentiate what kind of antibodies." I said, "Yes!" So he sent over one of his graduate students and a resident, and they worked with us to test those serums that he'd had for twenty-five years.

[extraneous words regarding Doctor Anderson's cat].

RA: We tested the serums and found that the antibody patterns were exactly the same. People produced the differential patterns that we produced in calves. So we were able, then, to show that our tests and our methodology actually could differentiate between the infection and the reaction to the vaccine. I developed... I say I... *My colleagues* and I developed... I didn't develop anything by myself.

DT: [chuckles]

RA: It was a team effort. Everything in my life has been a team effort. We developed a test called the rivanol test and, then, we developed one called the 2-mercapto-ethanol test, and, then, we developed one that they called the milk ring test, which was, originally developed by one of my colleagues here in Minnesota, Doctor [Byron] Rippke, but it was done for twelve cattle, because that was the size of the herds in Minnesota at that time. We had to develop one for herds of fifty and sixty cattle at that time. So my graduate students and I worked on developing that. We developed several ring tests that were able to detect the antibodies in the milk of up to fifty cows, which was a great improvement over detecting in twelve cows.

DT: Would you say that was in the late 1950s?

RA: It would have been from 1956 to 1978-1980.

At that time, I was finishing up my research and getting out of my research on brucellosis, because I had moved to the School of Public Health. I still had a laboratory in the Veterinary School and I still worked with technicians, but we were getting out of brucellosis.

At that time, I was appointed to the National Brucellosis Technical Commission, they called it. We had two veterinarians, an economist, a Ph.D. cattle representative from the Cattlemen's Association, and a physician from the East Coast, who had, actually, been a resident for Doctor Wesley Spink. Everything comes together with your colleagues, so the five of us were with the National Brucellosis...and we had a grant of over \$250,000 from the USDA to conduct a study to see if brucellosis could be eradicated in this country. People, particularly, the cattle owners, were saying, "It could not be eradicated," so why were we wasting time hassling them to test cattle. So we did the study over a two-and-a-half-year period and produced four volumes of data and reports. [chuckles] And we were able to convince the powers that be and our scientific colleagues that brucellosis could be eradicated on a local basis, and, if we could do it

locally, we could apply those same principles to doing it in a state, many states, a nation, and in countries. So we have been able to do it. It was a long struggle, because the industry and even my colleagues in government resisted some of the measures that were necessary to get eradication. [chuckles]

DT: What kind of measures were they?

RA: It was putting the responsibility back on the owner of the herd. What we wanted to do was to establish brucellosis-free herds and, then, to say that instead of trying to test every animal that came up, that was fine, but those tests were not too accurate, because you had animals in the incubation stage. So if somebody would sell an animal and it would test negative for *brucella abortus*, but unfortunately it was in the incubation stage, and thirty days, sixty days, ninety days later, it would abort a fetus or it would be infected, would show infection with a test. As a result, that was why people said we couldn't eradicate it. We said, "Well, if we started out and said we will establish clean herds—when I say clean...brucellosis-free herds—and do that and we only buy and sell from brucellosis-free herds, then, we don't have to worry about buying and selling. But, of course, the industry didn't like that, because that hampered sales and it also was against what had been going on where we had what we called cattle jockeys that would go in and buy at one sale and take them to another sale said, "We had brucellosis on wheels."

DT: [chuckles]

RA: It was an interesting time. I met lots of interesting people. We even flew in the airplane around part of the country from the Texas ranch, the King Ranch, [Kingsville, Texas]... The owner was a great advocate of eradicating brucellosis.

DT: That sounds like there's a lot of complexity and politics in there.

RA: Oh... I will just tell you that brucellosis was one of the most political things in the world, and, of course, the State of Texas and twelve southern states led that. Because after World War II, they found that the agronomists had developed soils and things to do with soil and with grasses so that you could raise grass in the south, particularly in Florida and other southern states, that you could graze cattle on. Of course, with their weather, this was wonderful, but the problem was that they couldn't keep good track of them, because of the natural barriers and the kind of growth in the plant life. So as a result, they sort of ran wild.

[laughter]

RA: It wasn't an easy process to gather them to know that you had brucellosis-free cattle. As a result, the powerful senators and representatives said, "This is ridiculous. We're just spinning our wheels. We can't do anything." That's why we had the National Commission. We actually did cost-benefit studies. That's why we had the economist.

They did those studies at Texas A&M [University]. They were able to come up with a cost-benefit study that showed, yes, it not only was good for animal health, human health, but it paid off in terms of cost benefit.

DT: Post World War II is where the southern states get more...kind of more powerful politically.

RA: Oh, absolutely! This was the era of southern power after World War II, because they were all Democrats and they stayed in office a long time, so they were the committee chairmen. But the northern states had dairy cattle, and they wanted to get rid of brucellosis so they could move their products internationally. They couldn't do that as easily if they weren't brucellosis free.

DT: Was brucellosis a problem internationally, also?

RA: Oh, it still is in many countries of the world, particularly in goats and sheep. That's, of course, where Sir Robert Bruce [Doctor Anderson says Robert Bruce, but correctly the given name is David] discovered *brucella melitensis* on the Island of Malta. That's why it was a great disease at that time. *Brucella abortus*...we called it undulant fever, because you had undulating fevers in the people who had been exposed and who became infected. We had as many as 5,000 cases of undulant fever. If you read Doctor Spink's book [*The Nature of Brucellosis*] on brucellosis... [laughter] He wrote a whole book on it.

DT: I'll have to look into that, too. [chuckles] You're giving me lots of things to look into.

RA: Oh, right, but that's the fun of these things.

DT: Exactly. Exactly.

RA: That's why I had so much fun; I had so many wonderful colleagues to work with.

DT: You mentioned earlier that having such great colleagues was one of the reasons you came to Minnesota. But were there other factors that led you to leave Colorado?

RA: Well, let's put it this way... I had a lot of fun and I was very successful in Colorado. I was president in 1955 of the Colorado Public Health Association, so I had many friends and colleagues there.

In 1950, we had a rabies outbreak in dogs in the City of Denver. My job was director of Veterinary Public Health for the city and County of Denver. When we had the outbreak, they changed my job to be not only in charge of Veterinary Public Health from the standpoint of food and milk and so on, but I became director of animal control and director of the animal shelter. So that's where I began to get my experience that I called on later on when I went into vet animal behavior. I had six years of working with animal

control and personnel, teaching them, and the animal shelter. I learned a lot about how to handle dogs and cats. That was what we were concerned about.

We did one other innovative thing at that time. The flu vaccine had come in, which was a live viral vaccine. It was really wonderful, because these other vaccines, the Pasteur vaccines, didn't work very well. That's why we had to have animal control. We had to keep animals apart, from coming to each other. With the new vaccines made in chick embryos, we could harvest the virus and we could get good solid immunity. The problem was we didn't know how early we could do it. My colleagues and I in Denver looked at our records of exposures during 1951 and we found that the greatest exposure came from puppies that were under six months of age. Yet, the regulations from the old vaccine, what had been in effect for many years, said you couldn't vaccinate a dog until it was six months of age. We said, "This is ridiculous. We have the evidence now. We've pulled the data together. It shows that these puppies go around and mouth people and sink their little teeth in." You don't know whether the person is going to get exposed to rabies or not, but the animal dies of rabies, so everybody has to take what in those days was the Pasteur treatment, which was terrible and caused all kinds of problems. We said, "We think that we ought to lower the age of vaccination." We made a proposal to say, "Every dog ought to be vaccinated at three months of age." That way, we wouldn't have them exposed, because they didn't get out in the community before three months of age. We were able to reduce the number of Pasteur treatments that we were giving in Denver and the surrounding areas of Colorado greatly. We did that. We were able to set up a rabies control program that was written up in the American Journal of Public Health in 1954, which talked about the Denver rabies control program. ["Representation without Taxation-Denver's Approach to Rabies Control," American Journal of Public Health, 1955 August, 45(8): 1005–1010] That was one of my first publications. [chuckles]

DT: Did other cities, other regions...?

RA: Oh, yes. They actually adopted that nationally. To this day, I don't think that anybody had ever done an animal study where they would deliberately vaccinate puppies at that age, and, then, challenge them two or three weeks or months later, because it was, one, too expensive and, two, they didn't want to do this because of animal welfare. As a result, we took the epidemiologic data, which said that it worked. That's why I can say that epidemiology is so important to all of us, because we don't have to do some of the animal experiments or human experiments as with the polio vaccine. We have epidemiologic data that will do instead.

DT: Did veterinary epidemiology take off after World War II, also.

RA: Correct. I have to give credit to Doctor James H. Steele. He now has a book [One Man, One Medicine, One Health: The James H. Steele Story] on his life. I'll give it to you before you go so you can see it.

DT: Great.

RA: He was a graduate of Michigan State [University] and he went to Harvard to get his MPH. Then, he went into the public health service. Since he was a big man—he was about six feet five [inches] and weighed about 225 [pounds]—he was very impressive, and he impressed people in the U.S. Public Health Service and became a leader. They respected him and they actually formed a Veterinary Public Health Division with Doctor Steele as the head of that division in Atlanta, Georgia, at the Communicable Disease Center. He was the founder, in many ways, of veterinary public health in this country.

So I was in good company and had good teachers. [chuckles] Good colleagues to work with.

DT: Yes.

While you were working for the City of Denver, you were also teaching at the medical school?

RA: From 1950 to 1956, right. I didn't teach at the medical school from 1947 to 1950, my first few years.

DT: Okay.

RA: I didn't have my MPH. I went back to school in 1949 at the University of Michigan.

DT: The move to Minnesota... Did they have a job posted or were you recruited? When you moved to Minnesota, was there a job already set up?

RA: Yes, there was. The Health Department, as I told you, was reorganizing. They were bringing in qualified people. Most of them had MPH degrees and they were qualified. That was very different from the one before. They had a new mayor. They had a new commissioner of health, so everything was different. But they didn't have a veterinarian.

The Public Health Service under Doctor Steele, which had just formed, was hiring veterinarians who had public health abilities, experience in local health departments around the country, hiring them to come, putting them out in various states to show what could be done.

So Doctor Martin Baum was assigned to the State Health Department in Colorado and he became my mentor. I saw him at a meeting in the fall of 1947, and he said, "At Bethesda, you had some training in epidemiology. Would you like to work in the health department?" I said, "I'd love it!" He said, "Well, they're going to set up a position in the Denver Health Department." When it was set up, he vouched for me and they gave me interviews, and I was able to obtain the job in Denver, Colorado, which was as their first public health veterinarian.

DT: You were telling me why you left Colorado and moved to Minnesota.

RA: Oh. [chuckles] In Minnesota, we had many more opportunities. We had not only a School of Medicine but a School of Public Health, a School of Dentistry, a School of Nursing, a School of Pharmacy, all on one campus. I wanted to be where we had all of these facilities and so forth. We had a wonderful food industry. We had a wonderful animal industry that really cared about disease control and we had a great animal disease control agency in this state, the Board of Animal Health. I worked with them very closely all my public career up here. It was a great opportunity to work with colleagues and to have support so that you weren't doing things alone.

DT: When you first got here, were you appointed in both Veterinary Medicine and Public Health or was it just Veterinary Medicine?

RA: I was very unusual, because Doctor Gaylord Anderson and Dean Bill [William T.S.] Thorp, the deans, agreed that they would split me fifty-fifty. So I was a fifty percent appoint in the School of Public Health as a professor and fifty percent in the College of Veterinary Medicine as a professor. I was very lucky to be a dual personality.

Doctor Anderson, after my first few months with him, said he'd like to have me become director of a new program that he wanted to institute, Veterinary Public Health. So, for thirty years, I was director of the program, Veterinary Public Health, at the University of Minnesota, in which students received an MPH degree. We had students from all over the world. You'll see on the DVD that we not only started one of the best programs but we built it.

Then, Doctor Will [William D.] Hueston came to Minnesota, was hired, in, I think, 1999. That was after I was retired. He, actually, gave new life to the program by saying we ought to have dual degrees for veterinary students and the School of Public Health agreed. So we now have dual degrees. Our students get a DVM and an MPH at the same time by going to summer school for four years. We, also, get veterinarians coming back to school for what we call our summer session. We now have the largest program, and have had for a few years, since 2001 or 2002, of Veterinary Public Health in the world.

DT: Goodness. Wow.

RA: It's very important, as you'll see from the associate dean in Public Health, what she says about it. They love that program. Doctor Hueston has done a great job and my colleagues in the Veterinary School have done a great job. It's worked out.

In Minnesota, one of my students was Doctor Mike Osterholm.

DT: Oh.

RA: He became director of epidemiology in the State Health Department. He brought in veterinarians so that we now have a number of veterinarians in the State Health

Department, as well as we have public health veterinarians on the [Minnesota] Board of Animal Health and we have public health veterinarians in other places in the state. It has been wonderful for me to see the growth of the professionals who can deal with animal health, human health, and public health.

DT: Yes. That sounds incredible.

When you arrived, the College of Veterinary Medicine had just become its own unit in the Institute of Agriculture? Is that correct?

RA: No. No, no. When I arrived, it was not a college. It was the School of Veterinary Medicine and it was part of the Institute of Agriculture.

They had just made Doctor William T.S. Thorp, who was a new dean... He had come here in 1954 to take the job in the Council of Education of the AVMA [American Veterinary Medicine Association]. They had to have a veterinary dean and so on. They had to be a unit to be approved, to be accredited. Doctor Thorp was a very, very special individual. He was in the National Institutes of Health [NIH], and he was a pathologist, and he worked in the animal branch of the National Institutes of Health as a pathologist. He was really very influential in laboratory animal medicine and became one of the leaders in laboratory animal medicine. The University of Minnesota hired him to come here and be their dean. Again, he was a cousin of Doctor Steele whom I mentioned earlier, who was the founder of Veterinary Public Health. So when he came, it took him a year or two to sort things out, but he worked to get the School of Veterinary Medicine not only to have a dean, but to have a separate entity. He worked very hard on that, but it still was part of the Institute of Agriculture.

So when I came, we were part of the Institute of Agriculture, but we had quite a bit of autonomy.

[extraneous conversation regarding cat]

RA: He [Doctor Thorp] was very influential in national circles in veterinary medicine and he had his cousin, Doctor James Steele, who was very influential. So he was very good for Minnesota and he brought a recognition in public health. That's why he went to see Doctor Gaylord Anderson and the two of them had great foresight, and they said, "Yes, we need Veterinary Public Health. That's why they brought me to the University of Minnesota. I was one of several candidates, of course.

After I'd been here a few months, Doctor Anderson said, "Well, we need to set up a program." Instead of having divisions, they had programs in Maternal and Child Health, Epidemiology, Statistics, Environmental Health, and so on. Veterinary Public Health became one of eight primary programs in the School of Public Health, and I became director of the Veterinary Public Health program in the School of Public Health.

DT: What was Doctor Thorp like? What was his administrative style like?

RA: In my view, he had a good administrative style. He would set the broad goals, and he did not try to guide his professors or department heads in any way. Well, I wouldn't say in any way, but did not try to micromanage. It was great to have... He, also, was so involved nationally that he was often gone. His associate dean and the department heads actually did most of the administration for the school in between his... He was an excellent, excellent scientist as well as administrator in his career. Actually, most deans, as you know, don't stay dean more than six, eight years.

DT: Yes.

RA: He was dean from 1954 until 1971, which is, what, seventeen years? He was a dean...one of the longest Minnesota has ever had.

[chuckles]

RA: He was dean for seventeen years. He really loved working with people, and he was very good at working with people in Medicine, Dentistry, Public Health, and so on.

[extraneous conversation regarding cat]

RA: I might say that in Laboratory Animal Medicine, there is a scholarship residency, for a student, because one of his friends and colleagues made a gift to the University in the name of W.T.S. Thorp for a residency in Laboratory Animal Medicine.

DT: It seems from the archival material that I've seen, obviously, he had a very incredible career. It seems like he faced some challenges with getting the Veterinary Medicine up and running and getting it accredited.

RA: [laughter] He came here in order to get that accreditation, you see. The American Veterinary Medicine Association had refused to accredit the Minnesota school, until they hired him and he was able to try and straighten some things out, both with Central Administration as well as within the Institute of Agriculture.

I'd like to say just a word in support for Doctor Joe [Joseph] Massey, who was dean of the Institute of Agriculture at that time. He was what I call a great thinker, and he was very liberal minded, and he was a great supporter of Veterinary Medicine. As a result, because of him, we were able, later on, to join the health sciences. If he had not been that kind of a person, if he would have said, "No, they're mine! This is mine. I won't let go of anything"... He said, "No, we welcome this, because we need to have connections from the Saint Paul campus to the Minneapolis campus. This will help to give us another connection. We're moving the College of Biological Sciences over here, so that gives us a connection. We can *all* work together." He was very supportive of the Academic Health Center and the health sciences and of the College of Veterinary Medicine moving from administrative control in the Institute of Agriculture to administrative control in the

Academic Health Center. But it was a struggle, because it went on, you know, for several years. [chuckles]

DT: It seemed like Doctor Thorp was always trying to get more space, better salaries, be able to hire more people. He felt he met some resistance from Central Administration.

RA: Where did you find that?

DT: In the University Archives.

RA: They are there?

DT: Yes.

RA: Oh, I'd love to go back and review that, because I was part of that. He had hired me; I was his first hire. We were very close friends and colleagues, so he used to share a lot of things with me that he didn't share with other faculty. It was great. In 1963, when Doctor Harvey Hoyt died—he was associate dean in the School of Public Health—he asked me to become associate dean. I became associate dean for the Veterinary School from then until 1970, when I went on sabbatical. Dean Thorp presided then in 1971.

DT: You witnessed some of the difficulties that he faced?

RA: Ohhh, I think I witnessed all of them from 1956 until 1971. [chuckles]

DT: Would you be able to elaborate on some of the things that you saw?

RA: Well, I would just say that to start with the School of Veterinary Medicine, which now is the College of Veterinary Medicine, was not welcomed by the University administration. The only reason that it ever became part of the University of Minnesota was because of some very influential newspaper people, and some very important columnists, and a representative in Congress—no, he wasn't in Congress at that time; he was a senator in the State Legislature—and the students who had come back from the war [Vietnam War] who were very active, and people like Doctor Glen Nelson, and Doctor Paul Cox, and Doctor Walt [Walter] Mackey, who were, later, my students in Public Health. [laughter] They came back to school again. Doctor Cox became a public health veterinarian for the City of Saint Paul. Doctor Mackey became a faculty member in the College of Veterinary Medicine. They were my students in the School of Public Health.

There were great, great problems with the Central Administration. Of course, that included funding. That included faculty. That included even students and support for those students.

I think that one thing that was the saving grace was the fact that Doctor Joe Massey was instrumental in helping Dean Thorp through those rough, rough times. I would just give

great credit to Dean Massey, because he could have kiboshed everything, but he felt that they did need to expand, that it was a service for the State of Minnesota.

The Veterinary School had great legislative support. I can remember, because, early on after I got here... I had worked for the commissioner of health in Colorado as a representative to the Colorado legislature. My father-in-law had been a speaker of the house and a senator and a representative in the Colorado legislature. So they asked me to help. Doctor Benjamin Pomeroy, who is revered as our living legend here, and I were partners. He had the office right next to me in the Veterinary School. We worked the Legislature, and the Legislature was very, very supportive of veterinary medicine, and, of course, in those days, there were more rural farm people, and they appreciated veterinary medicine and we had some great supporters. Doctor Pomeroy and I worked very hard. What we found was, if we would go out and talk to them on the farm in the summer and the fall and the spring, when the Legislature was not in session, it was a lot better than trying to get things done during the session. If you cultivated your relationships and you told them your needs and your plusses and minuses when they could listen on their own time and were not busy with other legislation... Actually, we'd go to the field and they'd be working in the field and we were riding on the tractor with them...

[chuckles]

RA: ...to talk about what we needed and so on.

We, also, had, at that time, a Building Commission of ten legislators who made recommendations to the Legislature on what money should be allocated for various buildings on the campus. Fortunately, the legislators were very favorable to Veterinary Medicine and we were able to get buildings at a time when nobody else got them or just one or two units at the University, like the Medical School and the Veterinary School, would get it or maybe CLA [College of Liberal Arts] and the Veterinary School would get it. People became very jealous of our success in getting funding. [laughter] But our requests were always reasonable. They were always looked at by the Building Commission. You had ten legislators reviewing it. They would ask very penetrating questions. On the other hand, once they were convinced, they became very supportive.

DT: That seems to be quite a contrast to the School of Public Health; that really didn't get any state funds.

RA: Thank you! You're correct. But, you see, we had a constituency and we, actually, worked at it. Doctor Gaylord Anderson really didn't believe in that, so it didn't happen. He was expecting people to want Public Health and he was expecting the deans and vice presidents to support Public Health.

I would say that Dean [Lee] Stauffer did a wonderful job of helping to break that barrier and get money, but he did it by hiring great faculty who got their money from NIH or from grants and contracts. Even in those days, the School of Public Health only got about twelve, fourteen percent of their income from the State of Minnesota. The rest was

from grants or contracts. So I give Dean Stauffer great credit for going out and getting faculty who could bring in grants and contracts.

Today, John Finnegan [Junior] has followed up. Doctor Finnegan has done a wonderful job with his faculty and the faculty have done a great job. Today, the state money is only about six or seven percent. The rest of it is from grants and contracts. They have really produced. They've actually been more productive per faculty member than any other group of faculty in the University; although, IT [Institute of Technology] and the Medical School have more total funds, because they have more faculty. Per faculty member, they [the School of Public Health] bring in more money to the University than any other group.

DT: And, yet, they probably get the least amount of state funds.

RA: They get the least amount of state funds; that's correct. Well, they have to survive. Actually, what has happened is that the School of Public Health has grown in terms of number of faculty and the number of students. So it's really been wonderful to have that growth and, again, Dean Stauffer was in the lead to start all that out and his associate dean, Robert Veninga. Dean Veninga was associate dean at a time when it was very important to have support from faculty and others during the early 1960s. We had the war [Vietnam War] and all that. Bob Veninga was really a bulwark to help Lee Stauffer. Of course, they're both my dear friends to this day, so I'm prejudiced.

[laughter]

DT: I'm a little prejudiced, too, having met them.

Why was the University administration so antagonistic to Veterinary Medicine?

RA: Well, because they didn't want it in the first place, and it was shoved down their throats. That's my words. [chuckles] They were forced to take it, forced to take it on and forced to make provisions for it. It took part of their budget. It took part of their administrative time. They were angry and they stayed angry, because they could remember it for a long time.

DT: [laughter]

RA: Doctor Bill Thorp had a rough row to hoe, but, thankfully, Dean Massey was supportive and the two of them together were able to do it along with the legislative support. Remember, the legislative support was very important. We had a legislative liaison from Central Administration, who was also very favorable to Veterinary Medicine, and he helped us a great deal when Ben Pomeroy and I would go to the Legislature. He would brief us and he would help us, tell us which senators and representatives to contact, and what the problem was, and help us solve those problems.

DT: Was that Stanley Wenberg?

RA: Stan Wenberg, yes. Stan Wenberg, in my view, was one of the most effective persons that we've ever had as the University representative at the Legislature. Again, of course, I'm prejudiced, because I worked with him.

[laughter]

RA: But it was a joy. Ben Pomeroy and I had a great relationship [with him]. Of course, Dean Thorp had a great relationship with him. It was really he and Bill Thorp that made things go.

DT: You had a lot of support from the Legislature. Did Veterinary Medicine also get funding from farming associations or industry?

RA: Yes. We didn't get as much funding as we do today. In those days, people didn't think of funding that way, at least in the veterinary or the agriculture community. Most of the funding came through the USDA. The USDA had projects and we had the Agriculture Experiment Station, which gave funding for research in the Institute of Agriculture. Fortunately, Doctor Massey was able to say, "We were part of this, so we'll keep up the funding." [laughter] So we were able to keep the funds that we had from the Institute of Agriculture from the Experiment Station, and the directors of the Experiment Station were very good to us, as well. So we were able to get funding from that area. For my brucellosis research, I had great funding directly from USDA. They sent me students who were actually workers while they were getting their degrees. We were able to do publications and we were able to develop new tests and new devices. It was a wonderful atmosphere to have the support of not only the Experiment Station and the Legislature, as I said, but the USDA itself, who didn't actually put so much in grants, but put in in terms of manpower. They used to buy diseased cattle for me, bring them in, and they paid for all the housing and all that sort of thing. So all my research expenses were actually covered by the USDA in many instances. That was very helpful. Of course, we had to be productive for them to keep that up. We also taught classes for them. They would send their people here to take a one-week course in this or a two-week course in that. We would teach them. I had, at one time, as many as five USDA employees working as graduate students for me. It was wonderful to have that kind of teamwork. We all had a common interest and we could do those things that we needed to do.

That's why we were able to develop all the new tests, why we were able to bring animals in from the field. One policy was that nobody in the U.S. had ever really found it necessary or feasible to isolate the organisms from animals they called infected. Any animal that we called infected, we would bring in. We would buy it and isolate it. When I say that, now, these were selected. We didn't bring in thousands. [chuckles] We brought in, maybe, fifteen animals a year. But this gave us a basis for our tests to say that these are what we're getting. This is what we see. With these hundred cows, we actually were able to get this kind of result on our tests. We were able to get this isolation and these are the places that we isolated it from. It could be anywhere from the lymph nodes under the tongue to the udder, from the front end to the back end. Of course, the iliac

nodes and others were very important. It was the fact that we had data. In fact, my students used to call me, "Database Anderson"

[laughter]

RA: They would make statements and stuff, I would say, "Okay, what's your source?" "Who said that?" "Where did you get it?" "What is the data?" They were young. They were lively. They were eager. They were very, very bright, intelligent, and they really stimulated me. It was wonderful. I've had a fun life, enjoyable life working with so many wonderful people. That's been what it's all about is working with wonderful people.

DT: How much time did you spend doing research versus teaching versus administration?

RA: [laughter] Well, I never really figured that out, because nobody asked me to put it down on paper, which was nice.

DT: [chuckles]

RA: But, I would say this... We did have NIH grants, Doctor Gennis and I. Doctor Robert Gennis was my colleague from Biochemistry. I give him great credit, because he brought skills and knowledge that we didn't have here. He, actually, had two of his graduate students who came down and worked in my lab. That was a great advantage, also, because that gave us the basic sciences, you see, to work on all of our research. I would say that Doctor Robert Gennis contributed greatly. He is a co-author on our paper in *Science* and he's one of the co-authors in the *New England Journal of Medicine* and some of the others that we did, as well. Then, we had several, as you'll see, that were in dairy journals or milk journals that we did together. He was responsible for that. The participation was great.

DT: In terms of teaching veterinary students... Were you teaching the veterinary students or were you just in the Public Health?

RA: No. I was teaching veterinary students. Well, I taught some Public Health students, but the first years when I was over here most of the time, I didn't actually teach classes over there. I taught seminars and I taught special classes with small groups.

[extraneous conversation regarding cat]

RA: I taught veterinary students what we called the veterinary public health curriculum. That was didactic classes. That was about three to five credits a quarter. Then, I also had rotations, what we call clinical rotations, where we took them to the field and we did work with things like mastitis, and food safety, and so on. So we went in many food plants and all that. They still have that program today, I'm pleased to say. In fact, they speak of it in there [referring to the DVD]. I think Doctor Trevor Ames, who is the dean

of the College of Veterinary Medicine, mentions it in the tribute, that we're one of the few institutions left in veterinary medicine that are still teaching some of those field courses. Our students get a great introduction to food safety and other things that we don't always get in the small animal world. [laughter] They also get plenty of small animal... So I taught that and I taught in the School of Public Health just periodically. you might almost say as a guest lecturer for the first few years. Starting in 1970-1971, when I moved to the School of Public Health... Well, I shouldn't say it that way. Let me back up. I taught School of Public Health students every quarter. These were...I called them graduate students who were SPH students. I taught that; they were seminar type classes, because I wanted them to be able to present, and I wanted them to be able to speak up, and I wanted them to be able to do research. They weren't just didactic where I lectured. They were discussions and their presentations, and they did the presentations, and I was able to be the critic and ask the questions about data. [chuckles] I really loved that. We did those four quarters a year, because we did those in the summer as well as during their three-quarter program. That was, I guess you would say, a heavy teaching load. But in those days, we didn't think anything of it, because in the Veterinary School, they taught lecture classes plus the clinic, so every afternoon was full and every morning was spent in lecture classes. We were used to having a lot of students and long hours. I used to look over at some of my colleagues in CLA and say, "Well, that's why they have so much time to write and travel and do those things."

[chuckles]

RA: But I got my share of that, too.

In 1964, I started to work for WHO [World Health Organization]. It was the regional WHO for the Americas...PAHO, the Pan American Health Organization. I was one of five or six individuals that worked for them for fifteen to twenty years teaching in Latin America, in Mexico and South America. They wanted to teach epidemiology and they tried to have Latins teach it. Can you believe that they would try to set up a course in, let's say, Brazil and they wanted to bring in teachers from Peru and other Latin American countries, Chile and so on, and the Brazilians wouldn't accept it. They said, "No! Our professors." These were professors in the area of public health or epidemiology in Brazil and they would bring them all together, bring about thirty or forty of them in, and, then, teach them in a summer twelve-week session. In other words, they objected to having teachers from Peru, from Argentina, from anywhere else. So they said, "Well, would you accept North Americans?" They said, "Yes." Of course, they became our students as well up here, then, they sent them to the School of Public Health and we were able to teach them in the School of Public Health and other schools around the country: the program in California, the program in Ohio, and so on. In the meantime, they wanted to go in and do a twelve-week course. I guess it ended up to be, probably, eleven weeks. Five of us—they would take us—would go into a country and set up headquarters in a town, in one of the cities where there was a veterinary school. Then, we would bring all these students in and have classes for them five days a week for the ten weeks. We had interpreters, of course. [chuckles] I tried to learn Spanish, but you know what happened...

DT: No.

RA: All of them wanted to speak English.

DT: Ohhh. [chuckles]

RA: They wanted to practice their English. This was their chance to practice their English.

DT: Sure.

RA: They wouldn't let us speak Spanish. The only time I got to speak Spanish was what we would call "on the economy," when we were out buying things or doing things in the cities or the countryside where we could actually talk with the native people. I did learn to get along and do well. I could drive. I could get directions. I could buy anything I wanted and so on, but it wasn't like trying to lecture in it. So we lectured in English and they translated for us. Actually, most of them spoke English, so there wasn't a lot of translation, so it was not bad. I did that. What we did after the third year, we started having the people who had been first up here in the country and had them come in and help teach, but we still had four of us, three of us, two of us, one of us...and I was the last one in 1962, 1963, and 1964. My last assignment was in Argentina with the people from La Plata, which is a veterinary school there [in Buenos Aires].

While I was there, they wanted to take advantage of me, so they asked me to spend a month with them as a consultant for their brucellosis program in the Department of Agriculture. So I got another month with them to be a consultant on brucellosis and help them with their brucellosis program. That was great.

That meant I spent from 1964 to 1981... That was I think when the Iron Maiden [heavy metal band] from England [recorded the song, *Como Estais Amigos*] called war on the islands off Argentina.

DT: Yes, the Falklands.

RA: The Falkland Islands. I was in Argentina, at the time, on my last assignment, as I said, to not only do the course, but to consult, and it was pretty iffy, because war clouds were in the air. They hadn't started yet. I got out about two weeks before they invaded the Falkland Islands.

DT: Wow [whispered].

RA: I said, "Ohhh, I'm so glad."

It was a great experience for me to work with them and I still have a wonderful briefcase from an international meeting we held in Argentina made of Argentine leather. Can you

believe that it was done in 1981 and, today, it is still like new, and I've used it and used it and used it?

DT: That's fantastic.

RA: They're wonderful craftsmen. It was a great experience for me to get to go down there.

I would have to say that Doctor Gaylord Anderson was also wonderful. I had classes the second half of the summer session and he, actually, was good enough to say the school would hire a professor of my choice to come in and teach that, so I chose a colleague from Iowa who was the state public health veterinarian epidemiologist, Doctor Stanley Hendricks. He came in and taught for me the second summer session for a number of years, which allowed me to teach the courses in South America.

DT: I know in the other health sciences, like in Public Health and in Medicine and Nursing, there were concerns that there was a shortage of manpower. Was there that same concern among veterinarians?

RA: Absolutely. But, we couldn't do much about it. During that time, I was on the Council on Education, which is the governing body, the one that had to accredit Minnesota. I wasn't on it then.

[chuckles]

RA: It was later on that I was on it for ten years. During that time, I think we accredited something like seven or eight new schools. So today, we have something like twenty veterinary schools. When I graduated, we had ten. We only had 10,000 veterinarians in the U.S. in 1944, and, in the profession, we only had six women veterinarians.

DT: Out of 10,000?

RA: Out of 10,000. Today, we have about 85,000 or almost 90,000 veterinarians, and fifty-two percent are women. I'm very proud of that, because I helped, as you will see in that tape [referring to the DVD], women succeed and helped encourage the growth of the feminine part of veterinary medicine. I felt they could bring a nurturing spirit that we really needed. I became a great advocate and I particularly wrote a lot of letters for women who were trying to become faculty members, who were trying to get jobs. It was difficult for a woman in those days, so I was happy to write recommendations. I made many friends that way of some outstanding women.

Some of my students and some of my colleagues became... The first female dean of a veterinary school in the U.S. was one of my dear colleagues here from Washington State University and here, Doctor Shirley Johnston. She, actually, was an associate dean here for a time being. Doctor Patricia [N.] Olson, for the last eight years has been the executive director...well, no, I guess she was the president and CEO of the Morris

Animal Foundation [Denver, Colorado], which is the largest foundation to provide for research in other than farm animals. They do small animals, dogs, cats, and so forth, birds, and they do gorillas in Africa, and they do wildlife, and they do alpacas in the U.S., and so on. They support research in all kinds of animals that aren't supported by farm animal funding. She is just a great person, and, again, a dear friend. She left Morris Animal Foundation after eight years. She felt that they needed to have a change. She is now a consultant for American Humane [Association], which made me happy, because they're the ones who have my not-for-profit foundation, Animal Behavior Resources Institute. It's a small world.

DT: Yes.

Did Veterinary Medicine set up specific programs to help entice women to come to the Veterinary School?

RA: Unfortunately, I think we were very slow to do that. We had so many people that felt that women should not be in veterinary medicine. That was a *real* bias. One of the reasons they said that was that they might get pregnant and not be able to work. They wouldn't be on the force. They wouldn't give us the workforce. The other thing was that they would drop out to take care of their children. That would be bad, because we had limited slots and we needed to save them for the men. My argument was, "Well, we need to bring in a breath of fresh air. We need to bring in nurturing individuals. We have that with our women." And they were very bright. They were very motivated. I thought they would do a great job both in research and academic and practice.

Actually, one of my early students who didn't go through Public Health but came out of our Veterinary School and worked for me in the brucellosis lab, went into large animal practice in Eagle River, Wisconsin. It was primarily an equine practice. She weighed ninety-eight pounds.

[chuckles]

RA: She says, "I can handle a horse better than any man," and she could.

DT: Did you have a tough time convincing your colleagues on this?

RA: Oh, absolutely. Absolutely. But there was a core of us; I wasn't alone. Remember that, probably, I would say, twenty-five percent of veterinarians, DVMs, were for increasing the number of women. Probably seventy-five percent said, "No. We don't need women. We can go forward." It was a hard sell, but, as you notice, we didn't have to recruit women. When you asked that question about did we have big recruiting programs, no, because we had more women than could be accepted wanting to come in. Our job was to try and get a way to have them accepted, to help them get accepted into the veterinary schools. That's where we were working was to get them accepted, and, then, after they got accepted, to get them accepted in the profession in terms of jobs...because they didn't think that women could handle administrative jobs. They

didn't think they could handle science jobs. They didn't think they could handle these things. The biases were tough.

DT: Did the college have anything similar for minority students?

RA: We finally did. We weren't as early as we should have been.

I say that because I work closely with Tuskegee [Institute] and the people down there giving lectures, particularly since I retired from Veterinary School here. I've been lecturing on animal behavior. I have a colleague who's a woman veterinarian at Tuskegee who is in charge of their animal behavior and human-animal bond programs. She would invite me down and I've guest lectured down there a number of times.

It bothered me that we didn't have strong recruiting programs. Our first success that was good was an Indian from a reservation in Arizona. I had the pleasure of helping his mother's pet when I was in Arizona a few years ago, because it was having behavior problems. He knew I was in town, so he called me and said, "Can you help?" [chuckles] He's been very successful. He actually is in veterinary dentistry. I think that was one of our first

I can't tell you the number... The Veterinary School would have to tell you the number of minority students, but it has increased, and it has been better. There is much more acceptance and much more help, assistance, for minority students than there used to be. I think that's a great thing.

DT: When do you think that effort started? In the 1970s or 1980s?

RA: Right. Correct.

DT: My understanding is that this was an effort to increase the minority recruitment among all the health sciences.

RA: Right, and that helped, because the Veterinary School, before that, had been on its own.

Now, I need to ask you something. What was the year that they formed the health sciences?

DT: Nineteen seventy.

RA: Okay. That was what I thought it was, but I wasn't sure. We worked very hard on it from 1960. [chuckles]

DT: It took a long time.

RA: It took ten years to get official designation. It didn't mean that we didn't have friends and didn't work together over there, because we did. Doctor Paul Quie, from Pediatrics, was a particular friend of Veterinary Medicine and of Veterinary Public Health. He helped put on conferences that we had, which were regional conferences for the zoonoses, diseases transmitted between animals and people. He was a sponsor, and he was a speaker, and so forth, along with my colleagues, Doctor Stanley Diesch, Doctor Bill [William] McCulloch, Doctor James Libby, Doctor Mike Pollan, and Doctor Ashley Robinson, all of whom were my graduate students, except for Mike Pollan. He was a graduate of the program at the University of California-Davis. They came back and went through the steps to become professors in the College of Veterinary Medicine and gave us a very strong program in Veterinary Public Health and Veterinary Medicine, which is unusual. Ohio State, California, Minnesota were the leaders in having veterinarians in their public health and preventive medicine programs.

DT: What were the relations like between Veterinary Medicine and the Medical School in the 1960s?

RA: I would say this... When Dean Thorp was here, the relationships were very good between the deans. Every dean of the School of Medicine and Doctor Thorp were very helpful to each other and were almost comrades in arms, in many ways, went to lunches, dinners, and so forth together. There was close cooperation between them.

Bob Howard... What year was he...?

DT: Nineteen fifty-nine until 1970.

RA: Okay. He was one of the movers and shakers who worked with Bill Thorp. I would have to say it was Joe Massey from this side and Bob Howard from the other side that helped make the transition for Veterinary Medicine into the health sciences.

[break in the interview]

RA: ...because he [Doctor Massey] was a real champion and a very good friend of Bill Thorp, so they worked together to get that done; although, there were many obstacles, because there were many physicians who didn't believe in veterinary medicine, at that time. [chuckles]

Today, it's very different. I found that when I was in public health in Colorado even, I had acceptance from many physicians. To be elected president of the Colorado Public Health Association, I felt was saying a word in favor of the fact that they recognized veterinarians. I was also elected when I got to Minnesota... In 1968—I can't remember the exact year but somewhere in the late 1960s—I was elected president of the Minnesota Public Health Association.

DT: Why do you think there was so much reluctance on the part of physicians to accept veterinary medicine?

RA: I can't tell you, because I'm not a physician. But my perception is that they felt... To begin with, veterinary medicine was an unknown quantity in the 1940s and there weren't very many of us, so they didn't have a chance to get to know us. It became much better. I found that once they got to know us... For example, in the Navy, we had some physicians and Ph.D.s who became *very* supportive of me and my friends. And certainly, here at the University of Minnesota, I had many physicians, like Doctor Spink, like Doctor Paul Quie, and so on, who were very supportive.

Doctor Spink actually got money from Lederle [Laboratories] to put on a series of lectures for about seven or eight years. They were called Spink Lectureships. They were held at his alma mater, Carleton [College, Northfield, Minnesota], and here at the University of Minnesota, on both campuses, and at [University of Minnesota] Duluth each year. He would bring in speakers who would speak on the One Health/One Medicine theme. We were very fortunate that he really did believe and he had some power as a former president of the American College of Physicians and was really looked up to here in Minnesota.

We were very fortunate in Minnesota to have wonderful relationships with physicians, and I always had, that's why I was appointed to the medical school at the University of Colorado. That was strictly physicians. [laughter] I found that physicians, in some ways, were more accepting of veterinarians than veterinarians were accepting of physicians. A strange paradox, but...

DT: During the 1960s, Dean Thorp and Dean Massey and Dean Howard were working to get Veterinary Medicine affiliated with the health sciences?

RA: Right Absolutely.

DT: Was it established as a college in 1970, then?

RA: Well, I think it was established in 1960-something. There is a book, a history of Veterinary Medicine in Minnesota [One Hundred Years of Progress: the History of Veterinary Medicine in Minnesota]. The senior author is Doctor John [P.] Arnold. I think the other authors are people I mentioned earlier, Walt Mackey... I'm not sure who the other two would be [coauthors H.C.H. Kernkamp, editor Thomas H. Boyd]. It's in the library and it's a history.

By the way, we are starting up a museum.

DT: I've seen, at least, online some of the information about that, yes.

RA: Okay. I'm on the board for the museum. I just wanted to be sure I mentioned it to you.

DT: Yes, that's great. I can't believe I didn't read the book first. [chuckles]

RA: Doctor Dale Sorenson... I'd love to have you interview him, because he went through all of this, too. I'd like to see if his thoughts were different. He was professor of Veterinary Medicine in the clinical side and did research with me on bovine leukemia and some other things that we did together.

We had a big Atomic Energy Commission [AEC] grant. [laughter] Well, it was radiation that we were looking at to see if it was causing malignant lymphoma in cattle, because we had a lot of it, and people were saying, "That's the result of the atom bomb tests, and so forth." So we had to investigate it to find out. There were five of us from the Veterinary School that were on the project for the AEC, and we had it for about eight or nine years. You can follow through and look at it.

DT: Yes. Did you determine that it was fallout?

RA: We determined it was *not* related. It was not causative, let's put it that way. It was coincidental. One of the reasons we did it was—coming back to epidemiology—that I was doing the epidemiology part with graduate students. What we found was that everybody said, "Well, we have a predominance of bovine leukemia in dairy cattle and in Holsteins." The first thing I did was try to get a base population and, then, try and look at the attack rates. When I did that, it said, "Yes, we do have a predominance. About eighty percent of the cases were in Holsteins, but about eighty percent of our population were Holsteins. So eighty percent of those at risk were Holsteins and only twenty percent were the other twenty percent at risk. [chuckles] So that is why they only had twenty percent in the other group. We didn't have a preponderance in any one group. But that was very helpful to be able to finally establish that. We actually had two people on our team, two veterinarians that worked for me, primarily, who would go out and investigate every single case of leukemia reported. We worked very hard to get veterinarians to report the cases. We would take tissues and so on when they went to slaughter and follow through and make sure we had a good diagnosis. First of all, you have to be accurate in your diagnosis and, then, you had to get good history and see what else is on the farm. So they actually made farm visits and actually saw the animals if they could. If the animal was already gone to slaughter, we tried, then, to get the best history possible. But in most cases, we were able also to get tissues. Then, we had pathologists on the team, medicine, epidemiology, microbiology, and so on. Oh, and Doctor Al [Alvin] Weber, who lives here [1666 Coffman Street, Saint Paul], was on the team as a histologist and geneticist looking at histology in genes.

DT: It really sounds like you were doing so much interdisciplinary collaborative research.

RA: Oh! Well, my life has been made up of collaboration, you see. As I say, I've never done anything by myself per se. I've always done it because of and with my colleagues and other people. I just feel that we have that much more input, we have that much more insight, we have that much more knowledge if we're not single.

DT: I've spoken to a lot of people who were doing research at the same time as you. Research is always, to some extent, collaborative, but it sounds to me that you, perhaps, have a more collaborative view than, say, some other people. How common was it to be working in such interdisciplinary teams?

RA: I didn't pay attention to that. All I know is that if I saw something, I would say, "How best can we do this? How can we get these people to work on it so we can cover...?" Just like the leukemia. Dale Sorenson and I were the ones who came up with this, because he was doing a sabbatical at the Atomic Energy Commission in Brookhaven [New York] and I was here looking at the excess, so we got together and, then, formed a team to really look at it. The same thing in brucellosis... That's why I was with a biochemist, a physician, and others, veterinarians to other disciplines, microbiology and so on, serology, to look at these things. We were able to actually do good work because we had different points of view and different skills, different knowledge. In that way, it wasn't just my thoughts. It was our collective work.

I found the graduate students were just marvelous, because they had lots of great ideas and lots of knowledge. They were taking courses, you know, all the time to do things. That was the thrilling part of it. A lot of my publications are done with my graduate students. It's just wonderful to have that kind of assistance and excitement, because that's what research should be all about: excitement! [Doctor Andersons claps his hands] That's what we need. New things.

DT: [chuckles]

RA: That's what I still think.

DT: Scientific American, yes.

RA: That's right. I also read *Mind*, because of my behavior interest nowadays.

DT: Sure, that makes sense.

You talked a little while ago about the struggle in the 1960s to get Veterinary Medicine affiliated with the health sciences. My understanding was that it was affiliated but it wasn't fully connected to the Academic Health Center until 1985.

RA: Uhhh... I can't tell you that for sure, because in 1971-1972, I moved to the School of Public Health and I retired in 1984-1985.

DT: Ah.

RA: So I was primarily in the School of Public Health then. I would take your word when you say officially. But I thought it was as official as Bob Howard, and Bill Thorp, and Joe Massey could make it back in I think that was 1970.

DT: Yes.

What led Bill Thorp to step down as dean?

RA: Ohhh, he had been dean for seventeen years. He was getting tired. He had many other interests. And people were getting tired after seventeen years of one dean. As you know, those were the days when he had survived the 1960s when most deans were not able to hold on and keep their faculty satisfied, in the 1960s...the Vietnam War and all that sort of thing. It was time for him to step down. I would just say this that I was gone for a year there when all this happened. Sorenson can tell you better, because I think he was acting dean, at that time, in 1970-1971 while I was gone. There was dissatisfaction in the department and they said, "Hey, it's all Thorp's fault. We need to..." [laughter] So anyway, the faculty expressed dissatisfaction and Thorp said, "It's not worth it." I think the vice president at that time said, "I think we need a change." So there was a change. Dale Sorenson can tell you a lot more about the details on that.

I would just say that what bothers me is that Bill Thorp has not received as much recognition as he should have received for all of his efforts for this college. If it hadn't been for him, they wouldn't have been accredited. If it wasn't for him, we wouldn't have had relationships with people like Joe Massey, and Bob Howard, and the Legislature, and with our Stan Wenberg, and so on, the people that made things go. He had great relationships with many of the presidents, so that helped, too.

DT: I saw some correspondence in the archives of faculty complaining that he was polarizing the faculty, as you say everyone was blaming Thorp and saying it was time for him to go.

RA: Right. As I said, unfortunately or fortunately, I was on a sabbatical. If you can believe it, I was studying psychology, because I had a very dear friend in the Department of Educational Psychology, who got me interested in going back to school. I took some of his seminars, and, then, I took courses here, just audited courses, in psychology, and became more interested in that. As associate dean—that was during my years as associate dean—I felt I needed to know about more about teaching and learning, and where do you learn it? In educational psychology. He arranged for me to take a sabbatical with four centers for teaching and learning run by educational psychologists. One of them was at the University of Michigan where the future president of the APA, American Psychology Association, was. Doctor Stan Erickson was the director of their center and he and I became very good friends. He arranged for me to go to Michigan and, then, to Georgia and, then, to the University of California, which is a private school, not a state school, in Los Angeles. They were tremendous. They had a great program in educational psychology. From there, I went up to the University of California-Davis for a few weeks, because they were doing some new things in veterinary medicine and had hired a woman psychologist to come in to help them. Then, I went to the University of Missouri, which was doing some new things. Then, I, finally, went to Michigan State University, which had a new medical school. There, I met with the guru of teaching and learning in medicine. I spent three months with him and his crew. He was giving a master's degree in teaching and learning at Michigan State University. He, later, became the president of the American College of Medical Education and worked for them.

That year, my guru here I'll think of his name in just a little bit—who is actually a neighbor to my townhouse here, was professor of Educational Psychology. He opened up a whole new world for me. That's what actually led me to animal behavior, eventually, because I had never really thought of what teaching and learning can do for people and for us and why we were doing it. We did it so poorly and we're still doing it so poorly. We are not taking advantage of what we know about education and learning. If we would take advantage of what we know about teaching and learning and what we're now learning even more about... We've known it for forty years, but old things die hard. I think of *Fiddler on the Roof*, where he sang, "I know what we're doing is no good. I know it's wrong. But it's *tradition*. It's tradition."

DT: [chuckles]

RA: That's what we've done with education, at least as far as I'm concerned, at the high school and university level. There's a great school at the University of Chicago where they took on the contract for the American Medical Association and helped them revise their tests for physician licentiateship. His name is [Paul J.] Griffiths. I got to work a little bit with him, got to know him. While I was on sabbatical, he was a great influence on me. I went to school with orthopods [orthopedists] who were learning how to teach on the new methods. It was not lecture. It was laissez-faire on your own, but you had objectives, and you had goals, and you had resources, and you had help if you got in trouble.

As far as I'm concerned, that's the way we should be going for all of us, because it allows the student to follow interests and at the same time achieve the goals, but to spread out and not be so narrow. Secondly, it teaches them what they're going to have to do *after* they leave school. How do you learn for the rest of your life? That's what we need is learning for life. I'm still learning and I'm almost ninety [years old]. I'll be eighty-nine in July. I still have a joy of learning. Why? Because I had people from educational psychology and so forth who helped me learn that there's a better way. Why we can't... Well, it's politics. It's money. It's, I've always done it this way or it threatens me, whatever. So we have to do a better job of teaching.

That was why in the 1980s, I became interested... Well, I took a sabbatical. Again, I took a sabbatical in the 1970s to study psychology and I took a sabbatical in 1980 to study animal behavior and do a residency. So I went to the University of California to work with one of the leading lights in animal behavior—two of them in fact, one in large animal and one in small animal and, actually, wildlife, who was my student back in Minnesota in the 1950s in Veterinary School, Doctor Benjamin [L.] Hart. [chuckles] He is world renown for his studies in both wild animal behavior and small animal behavior...well, all animal behavior. He's been honored by a number of groups, including the Animal Behavior Society of America and so on. He agreed to take me on

and the dean at California agreed to give me a position as a visiting professor, so I could go out there in 1980 and spend a year studying animal behavior and seeing clinical cases.

At that point, I came back here to enlarge my plate and slow down on some other things. I actually had a clinic for animal behavior cases at the Veterinary School from 1980 to 1984-1985.

When I retired in 1984-1985, I had made contact with Ruth Foster, who was the president of the National Association of Dog Obedience Instructors. She was wonderful and so practical. We worked well together. We wanted to try and do things that would stop being harmful. Everything we did with animals, in those days, was what a German colonel did to train dogs in 1900. Of course, it was all, in my view, very, very rough and crude. In my view, it was really painful. They used pain as the thing to train animals...pain and fear. Of course, all the people who went into World War II were taught pain and fear is the way to go, so all the dog obedience instructors who came out of World War II, all the men, were doing what? Pain and fear. All the books you read, you just go back and you say, "Oh, how could do they do that?" That's why we still have choke chains. Can you believe that? Using a chain on a dog and, then, using it as a choke chain...and we use crown collars. Unfortunately, we still have a few of those around. We even have a guy named César Millan, who is now changing, but was doing it very, very badly. My friends tell me that they have gotten to him and showed him how there are other ways of doing it, so we can be less harmful and guit using so much pain. Well, Ruth Foster was a kindred soul and she and I decided that we were going to have to stop choking dogs. There was no reason to choke dogs to get their compliance.

I had been a horse person in Colorado, as you know, of three-gaited and five-gaited horses. I also was a show person for showing cattle, because we won grand championships and so on. What do we use on cattle? What do we use on horses? Halters. So I said, "Well, let's use a halter." And as a result, we developed a halter called the Gentle Leader Headcollar for dogs or halter for dogs. It has been accepted worldwide now and is now in the Smithsonian Institute in an exhibit along with Velcro and Post-it notes and some other things that they said were fun things for people to do...ordinary. One year, we appeared as the centerfold of the University of Minnesota yearly magazine report to the alumni. I said to the person in promotions, "How come you have on one page, the facing page, all this high tech stuff of atoms and so on and, on the other facing page, you have a young woman with a dog with a Gentle Leader on it? I can't understand how you could... Ours is very simple. This is very complicated." "He said, "We needed something that people could relate to."

[laughter]

RA: And he said, "We thought if they can't relate to all the atoms and everything, they can relate to the dog and the woman and the invention,"

Then, when they set up the Wall of Discovery [installation on the University campus designed to celebrate the discoveries, inventions and creations of alumni and faculty of

the University], they chose the Gentle Leader® as one of the inventions for the Wall of Discovery. We've been very fortunate, again. I just think I'm one of the most fortunate persons in the world to have colleagues, and friends, and so on that will help me.

So Ruth Foster and I did develop the Gentle Leader[®] and we went on to get it accepted. So for twenty years, up until 1988 when I came down with myasthenia gravis, which is an autoimmune disease which disabled me so I couldn't travel, I traveled up to 50,000 miles a year talking to conferences, veterinarians, and student groups. I talked to at least ten to twelve student groups a year about animal behavior and the Gentle Leader[®] and getting away from harmful, cruel methods that cause pain.

Today, I think most veterinarians are now using something that will not cause pain. It's only people who have been taught to use pain that are still using it.

DT: So the Gentle Leader® you invented in the early 1980s?

RA: We applied for a patent in 1982. I began working with Ruth Foster... They had a national conference here and I met her in 1980 at the National Association of Dog Obedience Instructors—I guess 1981, because I was in California in 1980. When I came back from California, I met her, so it was 1981. We began talking and in 1982 and 1983, we came up with the halter idea. Somebody said, "Why don't you go to the University patent office?" which was brand new. So we did. They said, "Maybe we can help you." They put us in touch with Kathleen Terry, who became our guru for patents, and trademarks, and other things having to do with intellectual property. [chuckles] She worked with us and, of course, that brought revenue to the University, as well as to us. We gave that revenue to a residency for a veterinarian in animal behavior. Lorna [Reichl] has the residency at the moment. She's under the supervision of one of my former students, Doctor Duxbury, who is the head of the Animal Behavior Clinic at the University of Minnesota and teaches animal behavior.

DT: You mentioned a little while ago that you became interested in animal behavior through the educational psychology you were doing. You were thinking for teaching purposes and that led you to animal behavior?

RA: Absolutely. Absolutely, because I could see how we could apply the principles to animals and we weren't. So we've had a whole revolution with... Do you know about Clicker Training?

DT: Yes.

RA: She [Karen Pryor] is my dear friend and colleague. I called her and asked her if she would be the keynote speaker for a meeting of the APDT, Association of Pet Dog Trainers. She'll be the keynote speaker for a lectureship funded by Premier Pet Products, which I work with. It's called the Ruth Foster Lectureship. We did it in honor of my colleague, Ruth Foster. I just talked with Karen Pryor, who is the founder of Clicker Training. I've been associated with her for thirty years.

DT: My dog learned Clicker Training.

RA: Thank you! Thank you. Thank you. Oh, you're wonderful.

DT: It is quite striking. The trainer that I went to, it was all positive reinforcement with praise and with treats.

RA: Yes.

DT: And, then, moving on to the clicker. There was no negativity whatsoever.

RA: Thank you.

DT: I think my dog when I was raised and grew up in England, it was more negative reinforcement. This was right around the time that you started working with the idea. It's really quite profound and a relief that everything it so positive now.

RA: That's what we hoped. That's why I love the fact that ninety-five percent of our trainers are now women. That doesn't mean that all of them are gentle.

DT: [laughter]

RA: But it does mean we have a much better chance to have it. They've learned very quickly. The thing I like is that, sure, it's taken us thirty years, but we now have a whole new generation coming up that does... What I'm pleased with is that my colleagues tell me even César Millan has responded.

DT: I was going to ask you about that. My trainer that I used for my dog, she said his approach was problematic and other people I've spoken with who do animal behavior are very critical of him.

RA: Oh, I would never watch it [the television program], because I didn't want to see him cause pain and fear in those dogs. I still haven't watched it, but my colleagues who have recently say that he has made a big change and is now using much more of the principles of positive reinforcement and so on.

DT: That's interesting. I have watched it. I'll have to watch it recently to get a sense of how different it is.

RA: Again, we were so critical. We wrote big letters saying they should take him off and so forth. Do you know what National Geographic said? I couldn't believe it, because I thought they had principles. They said, "He has the largest audience of any of our shows. No way are we going to take him off." Money speaks, you see.

DT: Yes.

RA: I was *so* disappointed in National Geographic. I couldn't believe that they would say that. Well, so were all my colleagues. I wasn't alone. We were all just shocked.

DT: The field of animal behavior, pet behavior especially, when did that begin?

RA: As I said, Doctor Ben Hart was one of the pioneers along with Doctor Katherine [A.] Houpt...Doctor Ben Hart at California and Katherine Houpt at Cornell. They were teaching and they had some graduate students or residents like me, and we had a colleague had been in the Air Force and they sent him to get a degree in psychology. So when he came back, he was in animal care at NIH. He knew all the principles of animal behavior. There were six of us who, in 1990, petitioned the American Veterinarian Medical Association to set up a specialty college or a board. We, finally, were accepted. It was the American College of Veterinary Behaviorists, ACVB. I think that was 1993, somewhere in there, 1992, but we had worked on it for seven or eight years to try and get it. [chuckles] It was a long hard task, because our colleagues said, "Oh! behavior. That's not veterinary medicine." We said, "What kills the most dogs and cats in the U.S.?"

DT: Bad treatment, I'm sure.

RA: Unwanted behavior. That's where they get removed from the household.

That's why, wherever I go... I just was in Canada; I haven't been going to meetings, but I went to one for the first time in two years up to Canada for an international meeting. It was on exploring the mind of the dog. I was so pleased because people at that meeting would all come up and say, "Thank you." "Thank you." "Thank you." I couldn't believe that that many people had been influenced to change their ways of looking at working with pets. That has really been a reinforcement, a recent reinforcement. [chuckles]

DT: It's an incredibly positive change that you helped bring about.

RA: It just isn't enough. We have to keep going and we have to get the whole dog community, the whole cat community, and the people. Then, what we have to do... This is what I'm working with Karen Pryor on because Clicker Training works with people, particularly athletes. She has set up a program called "TAG Teach." What do you think that stands for? Teaching with Acoustical Guidance. You see, that clicker sound, the muscles tune into that and actually what you get is muscle memory. If you're doing a high dive, for example, and you have to have a hold in a certain way and you click if they're doing it correctly, do that about ten, fifteen, twenty times, pretty soon the muscle responds and remembers.

DT: Hmmm.

RA: So it's a teaching tool. That's why they call it Teaching with Acoustical Guidance.

DT: That's incredible.

RA: They actually do the same with ballerinas, young girls who used to get very unhappy and cry and so forth, because the instructors were so cross with them. "My instructor is mean to me." Now, they get clicked instead.

DT: That's amazing.

RA: What I'm hoping is that we will take this... That's why I wanted to go with American Humane for my non-profit is that they have a program for protecting women and children from abuse. What is that abuse? The child is crying and the child is doing something that they can't control and the father says, "Stop it!" It doesn't, so he throws it against the wall or beats on it, and even the mother may do some of this. It's because they don't understand behavior.

I sat in a veterinary hospital and watched a woman come in with her dog and with the child. They take the dog into the room and the child is out there with her. The child is into this and into this and into this, and she says, "Junior, no. No. Come here, Junior." Then, a minute later, she starts to talk with the person next to her and takes her eye off Junior and he's at it again. So she's constantly saying, "Junior, no. No. No. No." Of course, what does that do? That gives him attention. He says, "How do I get attention?" He's standing there. Oh, I'm not doing anything. I need attention. So he gets into trouble, so you say, "No..."

You should never, never say no on anything. What we do is we set up a condition where... Yes, we have to respond to the behavior. Yes, we have to try and mitigate or stop whatever the behavior so it doesn't hurt somebody, but what we try and do is redirect it by giving them another type of instruction so that we can say, "Junior, why don't you play with that?" or "Junior, come see me," or "Junior, go see so and so." Whatever. You do the same thing with an animal. You redirect their attention.

DT: That makes sense.

RA: He...[referring to the cat] I've had *shes* all my life. Since my wife died... She died in 2004. I hadn't had a cat, because I was traveling so much. Now, that I'm reduced to not traveling so much, I decided to get one, and I'm having the time of my life.

DT: [laughs] I bet.

RA: Yes, that's right. Oh, you're so good. Yes, you are! [whispered, speaking to the cat]

[chuckles]

DT: What led you to leave the College of Veterinary Medicine and move entirely to Public Health?

RA: Well, at that time when Dean Thorp was leaving, they brought in a new dean. The new dean and I were not very compatible. [laughter]

DT: What that Sidney Ewing?

RA: Right. Oh, you're pretty knowledgeable, young lady.

DT: I try. [chuckles]

RA: I had great disappointment in Doctor Sidney Ewing. He was doing some things and changing some policies. I went down to see him and I said, "Sid, you really need to reconsider this and rethink it. I'd be glad to give you some additional information and so on, because I think we should not go that way and maybe redirect it this way—or at least some other way." He said, "RK, when I make a decision, I make a decision. I never change my mind." I said, "Oh, you don't mean that. You don't mean that, because all of us need to be open." He said, "I just told you, I've made a decision and I don't change my decisions." I said, "Well, Sid, I feel sorry for you. I don't know that you're going to last very long here, because that isn't the way we do business in Minnesota." He said, "I'm the guy to decide that. I am the dean." I said, "Yes, you are."

We had a very good young man, who now is at the University of Florida. In fact, I recruited him from the Kansas State University. He was acting head of the Department of Medicine when all this happened. He was an ophthalmologist. He was very good. The dean at Florida called me when I recruited him and said, "You can't do that, because I was going to recruit him." I said, "I'm sorry. He's coming." [laughter] His wife was from White Bear Lake [Minnesota] out here. He became a good friend.

When Sid said that, I said, "Well, I've got to think about changing." I went to... Why can't I say his name? I went to the acting head of Medicine, the person I had recruited to come here. He was acting head while Dale Sorenson was away. Dale Sorenson was going to be the head of Medicine. I said to him, "I need help. I can't survive."

[laughter]

RA: He said, "What would you like?" I said, "Could we have it exchanged so I could go fulltime in the School of Public Health?" He said, "I think Sid Ewing would be glad to get rid of you." [laughter] I said, "The feeling is mutual." So, as a result, we worked it out. Then, of course, I went to Lee Stauffer and Lee Stauffer was wonderful. As I say, I had known him since I first came. He, actually, had helped me advise veterinary students, veterinarians coming into the School of Public Health, because he was there all the time and I was only there part-time. It worked out just beautifully. He said, "Yes, I think we can find room for you." We worked out the transfer and that's why I went to the School of Public Health and entered fully into another phase of my career. I was very

active with people like Bob [Robert] Veninga and Ray Karloff. Ray Karloff has a book—I think the name of it is *I Knew Ray Karloff* or something—that his wife had published. You might want to look at that, because it has a lot of things about the School of Public Health. Of course, Bob Veninga and Ray Karloff were dear, dear friends, too.

Anyway, I went to the School of Public Health and that opened up new aspects in terms of the human/animal bond. Here, I have to give credit to one of my early graduate students, Doctor William McCulloch, who was at the University of Missouri and, then, University of Texas as a professor, and, then, Colorado State University, and, then, finally retired and is now in Oregon.

He and I and Doctor Joe Quigley and Doctor Stanley Diesch, all three my graduate students, founded the Delta Society. Our names are on the wall out there along with Leo [K.] Bustad, who was the dean at Washington State University—oh, and Bill McCulloch's brother, Michael McCulloch. He was a psychiatrist. [chuckles]

I did the study for the National Health Manpower for NIH on the role of veterinarians in human health, because Congress was going to defund all of veterinary medicine, because they didn't believe it was related to human health. They were trying to cut like nowadays. I had served on several panels for NIH on education. When they put out an RFE [request for evaluation] for a group to take over studying if veterinary medicine was actually part of the health professions, they sent it to me, as well as their regular people. I went to a psychologist in the Medical School that I knew well and to Leonard Schuman, my boss in Epidemiology, and I said, "You know, I think we ought to do this. With my background now in educational psychology and our Ph.D. psychologist and you as an epidemiologist and me as an epidemiologist, we ought to be able to figure out a way. Do we contribute or not contribute as veterinary medicine?" What I did was I called on my friends and colleagues. In the front of that book, you'll see that I have about 300 names listed that we called on as resource people, which gave us a wide coverage, gave us a lot of support. [RK Anderson, et. al., "Summary of a description of the responsibilities of veterinarians as they relate directly to human health: a report," National Institutes of Health (U.S.). Bureau of Health Manpower.; University of Minnesota. School of Public Health. Minneapolis: School of Public Health, University of Minnesota 1976] Then, I said, "What we need is a panel. This is something that you can count. You're going to have to have a lot of opinions. It needs to be professional opinions. It needs to be backed up as much as possible by data, but, in the end, it's going to be belief and policy and what people are willing to stand up for. What we need is a panel of experts. If we're going to relate to health, it should come from across the health spectrum." So I actually had sanitary engineers or environmental health people. I had psychologists. I had deans of medical schools, deans of schools of public health, professors, and so on across the spectrum. We had what I think is one of the best panels ever assembled, including a past president of the American Veterinary Medical Association as my chairman. He was also dean, at that time, at Tennessee. He had been at Michigan State. They agreed and NIH funded us. I think we had \$250,000 for that year. I hired a sociologist from health administration, a health administrator, two sociologists, and, then, another epidemiologist so that we had a team approach, again. We, first, tried to dig up the data and, then, we

wrote on that and we produced a thing that thick. Then, we produced an executive summary of two pages.

[laughter]

RA: The key to it was that veterinary medicine and human medicine are inexplicably bound to each other, and it is impossible and there's no point in trying to tease out all the various facets and separate them. Therefore, in our judgment, as a panel of experts, veterinary medicine is part of the human health team. That was the first time we'd ever had a government report to say that veterinary medicine was part of the human health team.

I can give you a copy of that.

DT: That would be great. Yes. I'm just writing down that I need to look at it.

RA: I can get the Veterinary School to send you copies, too.

DT: That would be great.

RA: That way, you'd have it. But you just tell me what you want.

DT: Sure.

RA: Like this book here, they can send you copies of that. The brucellosis report, you might like that.

DT: Yes, absolutely. That's great.

RA: My part was in Part Two, which talked about the programs we had.

We started the Delta Society and it's been very successful.

DT: What does that society do?

RA: Oh, it is the human/animal bond society for the United States. The reason it's called Delta is because our leader, Michael McCulloch, wrote a section for us in that report and he used a triangle to represent the veterinarian, the pets/animals, and the consumer/owners/people. So here is pets, people, and veterinarians, a triangle, a delta. It was his idea to call it the Delta Society. At the last meeting of our advisory committee, his brother, Bill McCulloch, who was my graduate student, insisted that I have a psychiatrist on there. I said, "You're right. You're right." So I appointed Michael McCulloch to that commission, also, and they approved it, NIH. He wrote a section on the human/animal bond. That's where he put in the triangle. So we formed the Delta Society. The five of us each gave one hundred dollars. We went out to the airport to see him off to fly back to Portland [Oregon]. We each gave him a hundred dollars to start a

foundation. That's how the Delta Society got started and it's now flourishing, helping people with teams of a person and an animal, person and a dog primarily, who go into nursing homes, convalescent homes, hospitals, and so forth and visit to help people in terms of recovery.

DT: So your group that founded the Delta Society, that's really the beginnings where animals are seen to have a health benefit to humans. This is the 1970s?

RA: Well, I don't want to say we were the first to say we had a health benefit, but that was one of the groups. You can get in here... Let's just say it this way, that Bill McCulloch wrote an article in the 1970s, when he was at the University of Missouri, about the urban veterinarian and the urban pet. In there, he talked about the human/animal bond and how we needed extension veterinarians who would work with consumers in the cities, like we have extension veterinarians who work with the farmers on the human/animal bond. Then, of course, we had one of the fathers, a psychiatrist from New Jersey, who wrote, in my view, the first book about the human/animal bond where he used his pet to help with psychotherapy for his patients. In my view, that was the first.

If you'll give me a list of the things you need, I'll get you his name, too.

DT: Sure, yes.

RA: Yes, the Delta Society was the first one to really form a society for people, animals, and pets, and the health aspects. That's why we call it the pet connection.

DT: This is why I was so excited to talk to you, because this is fascinating and such an important concept now within society, that now the rise of therapy dogs has taken off now, it seems.

RA: Of course, once we had the Delta Society, we also had two or three other national therapy groups, which are doing great work, too. We have right here in Minnesota, of course for a long time, since the 1940s, we've had Guide Dogs for the Blind. There is one in California which is... It's not guide dogs but...

DT: Service dogs?

RA: Well, yes, but it's a big one, actually bigger than Guide Dogs for the Blind. It's in San Rafael, California, and they now have another place in Oregon. I actually used to go down there when I was with Ben Hart in California. I would go down and work with them and their puppies, because I was interested in the development of puppies and the periods for socialization, how you can best socialize puppies to accept humans and be comfortable with humans. I would go down there and work with them probably a couple times a month. I got to know them well and became great friends there.

DT: Do you know the Monks of New Skete [Cambridge, New York]?

RA: Yes. I would tell you that the Monks of New Skete were doing what the soldiers did. They did what Ruth Foster and I felt was very cruel and was painful for dogs, was not in the best interest of dogs. Yet, they became very popular, just like our television personality. They became very popular because, yes, they were successful or in terms of the woman in England [Barbara Woodhouse] who would say, a word she used, "Yippee, let's go." She was again, using pain. Monks of New Skete used pain, would roll dogs on their back and use [unclear] and all that sort of thing. It was not something that you would want, so we were trying to supplant and get rid of or go beyond and, hopefully, change people's minds...minds and hearts...

DT: Yes [whispered].

RA: ...and be humane and to provide a loving environment.

DT: That is quite a challenge you face given the popularity of these other individuals.

RA: Oh, yes, because what happens is this is what we do with our kids. We yell, "No!" and we shout at them and we don't offer them alternatives. All we do is say, "Don't do that." Well, what should we do? See?

That's why I feel it's so great that American Humane has a real opportunity. I'm not sure they'll take advantage of it, because they've been cutting programs. They have a new CEO [chief executive officer] [Robin R. Ganzert]. She's a very lovely woman, but I'm not sure that she understands what it's all about, except in raising money. What I'm concerned about is that they increase their programs for women and children and increase their programs of education, humane education, and humane training, and so forth. Some of those programs, they've abolished or put on hold. That's, in my view, not as helpful as it could be for the whole movement. If we're going to be an American Humane Association... Again, I received a lifetime achievement award from them in 2000. [laughter] So I can speak, I guess. I'm disappointed that they aren't as vigorously pursuing what I think are their main objectives, but, as she says, they have to have money. So what she's doing is pushing programs that will bring in money and, of course, some of those programs are like her Red Star Rescue of disaster victims and that kind of thing. Yes, that appeals, showing a puppy that I rescued from a society, the animal shelter and if I rescue a puppy from...

What I'd like to do is not start at the back end and do a better job with shelters and rescuing animals and teaching them then. I'd like to see us teach owners and potential adopters how to handle the animals they adopt or the animals they purchase or the animals that are given to them so they never have to go to a shelter. They stay in the home. One of my students, Margaret Duxbury, did a paper—I do have those right here, copies of it—where it shows that we can keep them in the home with appropriate socialization of puppies and training. We used a very stiff criterion which was, after I think it was four years, we called them and we asked, "Is the puppy still in the home?" We didn't ask them, "Do you like the puppy," or "Do you not like the puppy," or

whatever. We did ask a lot of questions, but that was the key. If they said, "No, the puppy is gone," of course, we asked why and so forth. It was usually behavior. The key here is that people who went through the puppy program overwhelmingly still had their pups and those who didn't go through the program did not have them. We even used the Public Health School statisticians to do it.

[laughter]

RA: That paper is seminal. There are some others, of course.

The National Commission [correctly Council] on Pet Population is another one that you should be aware of. Patricia Olson and one of my dear friends at Colorado State University were the leaders of that movement, the National Pet Population Coalition. Mo Salmon was his name, S-a-l-m-o-n. He's just received, I think it's a \$250,000 award from an international organization to do things internationally that he is big on. He took time off to help Patty Olson, because they were both in Colorado. They both wanted to do something. What they've done is they've produced a number of epidemiologic studies to show why people relinquish their pets.

[break in the interview - phone rings followed by extraneous conversation]

RA: Where were we?

DT: You were talking about the paper by Patty Olson and...

RA: Doctor Olson and Doctor Salmon, they got a number of my colleagues, and a couple, three of them were my graduate students to do papers and do studies. So those studies are available and they're very, very good to show why people relinquish pets and what we could do to stop the relinquishing. It all comes down to behavior and, yet, we cannot get industry, we cannot get organizations and so forth to realize that that's what they have to support is behavior. It's behavior of animals *and* humans. Changing behavior is difficult in humans. It's not nearly as difficult in animals.

[chuckles]

DT: If only it were easier in humans.

RA: Anyway, you can look at our Legislature and our Congress to see what that...

[chuckles]

DT: You mentioned when talking about Sidney Ewing, when he came in as new dean, that he started to change things. What kind of things did he change?

RA: Ohh, well, I don't know that... Let's say it this way... I don't even remember frankly. [laughter] I guess I blotted out a lot of that stuff, because it was not productive

and it wasn't something that I was really interested in doing. I just know it was creating problems. I didn't want to be a part of controversy and it was best for me to move on.

DT: Once you moved to Public Health fulltime, did you keep track of what was going on in Veterinary Medicine?

RA: Let's put it this way... My colleagues, of course...we interacted, and I got informed a lot, but I really didn't try to stay involved in the Veterinary College, because I was busy enough being involved... At that time I was a member of National Brucellosis Technical Commission and I had a grant from the NIH for the study of veterinarians in public health. So those two big projects, both of them, were multi hundred thousand dollar projects. I did keep up some research. I did have a technician and I did have a grant from the USDA, a research group in Ames, Iowa, the National Center for Investigations of USDA, which gave me a grant to study vaccinations in animals and vaccines. I did do that for another couple years. I was only peripherally involved. I had a graduate student and I had a technician. My technician went on to vet school, which I was so proud of. Then, she also went on to become a member of the [Minnesota] State Health Department.

DT: That's great.

RA: I'm so lucky.

DT: [chuckles]

Can you talk about the CENSHARE, the Center to Study Human Animal Relationships and Environments? You helped found that in 1981. Is that right?

RA: Right. Actually, it became official. Doctor Gerard has just reminded me of that. We had the vice president, Rana Murphy, from the University, and we had the dean of the Veterinary School, Bob [Robert] Dunlop, and the dean of the School of Public Health, Lee Stauffer, who all gave money for the first two years to support it. Then, after that, it had to support itself. That was why it became an official center for the University. It wasn't just something that we all dreamed up.

DT: It was part of the other efforts like the Delta Society? The creation of CENSHARE was related to the Delta Society and that general movement?

RA: Absolutely, absolutely. But we wanted to do something here at the University of Minnesota. We were having conferences and it was in connection with this conference. The University of Pennsylvania had just set up a center on human/animal interactions, so we said, "Hey, if they can set up a center, so can we." At that time, I had Joe Quigley and Stanley Diesch and Bill McCulloch and so on all interested. Then, Ruth Foster became interested. She and Joe Quigley manned the office a lot. [chuckles] We had a secretary. We actually were in Ford Hall for a number of years. Then, we were in the McNamara [Alumni] Center until a couple years ago. You'll hear in that transcription

what our vice president, Frank Cerra, said. I learned that he has a lot of friends. When I agreed with the other vice president to move CENSHARE out of those offices up in McNamara and give them to somebody else, I really heard about it. He [Frank Cerra] said, "I can promise you that RK did get some offices in 717."

[chuckles]

RA: So our offices for CENSHARE now are in 717, the Delaware Street [Building]. We're near the front door, so we can take dogs and cats in and out. I had to smile at him when he said, "Yup, I really got heat for that one."

DT: [chuckles]

RA: He put it on tape.

DT: Where did the Center get its funding from then?

RA: Well, it got its funding from the royalties from the head collar for a while, because we were putting it into that. It got its funding from grants or contracts and donations. Unfortunately, I'm one of the world's worst fundraisers.

DT: [chuckles]

RA: I couldn't raise money for a number of things, but I couldn't raise really big money for CENSHARE and I've been unable to raise big money for my non-profit foundation, Animal Behavior Resources. That's why we gave it to American Humane. Hopefully, they can raise some money for it.

DT: What kinds of things were you doing at CENSHARE?

RA: Oh, we were trying to be all things to all people, at that point. [chuckles] But, we were primarily trying to work with nursing homes. We made a number of videos on how you could have pets in nursing homes and how you could have visiting pets and all those sorts of things. Ruth Foster and Joe Quigley were heavily involved in that. We had David Garloff, who was director of education for the health sciences. He was a dear friend, whom I'd known when he was at Missouri, and, then, he came up here. Actually, I was on the committee to hire him. [laughter] He was very good about that, and we put on conferences. We had a number of conferences, even conferences on animal welfare and farm animals, as well as pet animals, a number of things.

I'd love to talk to you more about CENSHARE. I think we better have a session on CENSHARE.

DT: Sure.

RA: It's a thing in and of itself.

DT: With the animal behavior work that were doing, it was focused, it seems, largely on small animals?

RA: Right.

DT: Was there any discussion of it applying to large animals, too?

RA: No, I didn't. As I say, I grew up with large animals and I had no way of handling them. What I did was I went into consulting on small animals when I retired from the University. I had a companion animal practice, you might say, on behavior. So I actually made house calls for behavior cases for twenty years. So I got to know a lot of people in the community who needed help with behavior for their pets. I was able to help a great majority of them—at least they told me so.

[chuckles]

DT: That's great.

I recently saw the documentary about [Doctor] Temple Grandin.

RA: Oh, yes, Temple Grandin. That's a long story, but I'd love to tell you that one, because I did have some influence there.

DT: We can save that till next time.

RA: Yes. Put down those other questions and why don't you put down the chances I had to influence people...

DT: Okay.

RA: ...because she's not the only one. I've had a wonderful, wonderful time of helping people, just because it was opportune.

DT: Wonderful.

RA: They took advantage of it and they were great successes.

DT: Great. Well, I look forward to hearing more about that.

RA: If you have people that are motivated...

DT: Yes, that will be great to talk about.

Before we finish here today... You mentioned Dale Sorenson. Is there anyone else that comes to mind that I should interview?

RA: Let me think and I'll give you a list.

DT: Okay. Great. That sounds great.

RA: But Dale Sorenson is the one I'd say is the number one to interview. Then, Bob Dunlop, who is now retired, I don't know whether he is still in Oregon, but he has connections here and he was in the midst of all of that.

DT: Excellent. Well, thank you.

RA: Well, hey, thank you. You let me ramble.

DT: [chuckles]

[End of the Interview]

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Interview with Doctor Robert K. Anderson, Part 2

Interviewed by Dominique Tobbell, Oral Historian

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

Interviewed at the Office of CENSHARE

Interviewed on June 13, 2011

Robert K. Anderson - RA
David Garloff - DG
Dominique Tobbell - DT

DT: I'm going to reintroduce us for the record. This is Dominique Tobbell. I'm here with Doctor R.K. Anderson for our second interview. It's June 13, 2011. We are in the office of CENSHARE on the [University of Minnesota] campus.

RA: Would you spell out what CENSHARE is?

DT: Sure. CENSHARE is the Center to Study Human-Animal Relationships and Environments.

RA: [clap] Perfect!

DT: I passed the test. [chuckles]

I'll save my questions about CENSHARE until David [Garloff] is here.

RA: Yes.

DT: When we left off last week or the week before, I'd mentioned Temple Grandin to you and you said that you knew her and you had some influence on her life.

RA: I think I did and I'm very pleased that I was able to help her. She called me and said that she had invented a squeeze machine like a cattle chute where they squeeze people in because it had helped her so much as a child when she was upset with things, emotionally upset, to crawl in the cattle chute and squeeze. So she said that she'd

developed this for herself and she thought it would help others. So she sent it to the Physical Therapy Department here at the University of Minnesota and they were going to examine it. Then, she was going to come and talk with them about how they could adapt it and adopt it. She called me and said she would like to know if I would take her over and introduce her to the professors in Physical Therapy. I said, "I'd be glad to."

So she came and we went over to Physical Therapy. She put on an excellent demonstration, and they were duly impressed, and they talked together about what they might do with it. Then, it was time for them to go home, so I invited her out to dinner.

When we went to dinner, we started talking about what her goals in life and plans were. She had a master's degree from Arizona State University in animal science and had been working in animal welfare, particularly with cattle. She had some great ideas on how to restructure cattle pens and what was bothering cattle going up and how to handle cattle in slaughter plants and so on. But the problem was that she didn't have credibility. She was having a difficult time getting people to listen to her, pay attention to her. I said what she needed was a Ph.D. She said she didn't know whether she could get accepted and hack it because of her autism.

I said I knew a professor from the University of Illinois and he was very much interested in animal welfare, as she was. He had been here several months before giving a lecture on animal welfare and swine. I said I'd be glad to recommend her to him. She said she'd think about it. She didn't know whether she really wanted to do it, but would I go ahead and do that. I said, yes, I would. She applied and was accepted. The man I knew was Doctor Stanley [E.] Curtis, but she actually did her work under one of the other professors, although, he [Doctor Curtis] sort of supervised and helped her with it. She got her Ph.D. at the University of Illinois, then, several years later. I feel that she was a great student and she accepted advice, or at least comments, very well.

[knock at the door]

RA: Hi, Dave.

DG: How are you?

DT: Nice to meet you.

DG: And you're?

DT: Dominique Tobbell.

DG: Dominique, glad to meet you. Dave Garloff.

DT: Thank you for coming.

RA: This is a retired dean at Montana State University. We've known each other since 1970.

DT: I was looking up information on you this weekend. You were at the University [of Minnesota] from 1973 to 1997?

DG: That's correct.

DT: Ah, you had a long tenure here.

DG: Yes, I did. It was a great time.

RA: He was director of Continuing...?

DG: Oh, you mean most recently?

RA: No, no.

DG: I was director of Learning Resources. That was a program of the vice president's office. So I worked with all of the schools of the health sciences. I got around.

DT: [chuckles]

DG: There was never a dull moment, was there?

RA: I got to help hire him, because, as an associate dean, I was one of the committee members along with some of the associate deans from Pharmacy, and Dentistry, and Medicine that did the hiring for the health sciences.

DG: So he knew me before I even came to Minnesota from the Missouri days.

RA: Give us one more minute. We're just talking about Temple Grandin.

DG: Oh, okay.

RA: Go ahead if you want to.

DT: When she came here with her squeeze machine, when about was that? Was that in the 1980s sometime? [chuckles] Testing your memory bank.

RA: Dates are hard to come by in terms of that.

After she got her Ph.D. and went to Colorado State University, she was invited back here and has been invited back here a number of times and has been very good to help our Department of Animal Science. Her second time back, I was privileged to introduce her to the audience that she was going to speak in Animal Science, who were sponsoring it.

Since then, she comes and speaks to our veterinary students every couple of years. She's very generous with her time and her knowledge. I think we need to really give her kudos not only for her knowledge but for her generosity in sharing with others what she does. Of course, her books now and her movie [*Temple Grandin*] are even more.

DT: Yes.

Now, we can get it online or we can get it anywhere, so her knowledge is being widely distributed.

I think the greatest thing she did was to set up methods of accountability for slaughter plants in terms of humane slaughter. She set up a ten-point check scale, which she talks about. Her motto was "Keep it simple." She did and it was very good. The corporate giants, such as McDonalds and Cargill, thought it was great. We have improved stunning and killing in slaughter plants and we've improved the corrals, and the fences, and the runways, and all the things that lead to the slaughter floor. Because of her, we no longer have the fear, and the trepidation, and the emotional stress that they used to go through. What we now know is that this has an effect on the meat.

DT: Hmmm.

RA: You actually have a better carcass and better food if you have animals that aren't stressed. So she's done a great thing and I think she deserves all the credit, and even more, for leading the way as a leader in the field.

DT: I recently saw the movie, I think last summer, and it was really powerful. I've got on my list several of her books to read. I'm glad to hear that...

RA: The thing that I think is so powerful is that she now has credibility with her Ph.D. and she has credibility in terms of not only the meat industry and the restaurant industry but, for example, Target Corporation actually had her here for their annual meeting to talk about how they could use people with autism more in the community and working for Target and other business groups, because they actually can contribute and have things to contribute, instead of putting them on the shelf and wasting their talents. She's just a very good example of what can be done if we can help people instead of putting them aside or instead of downgrading them. You see, she did get her Ph.D. and she has contributed to society *and* to animal welfare.

DG: What is the name of her movie?

DT: I don't remember what it was called. It may have just been...

DG: It was about horses, right?

DT: It was her story, basically, how she developed these relationships with animals, starting with horses and, then, cattle.

RA: It came out about three years ago.

DT: Yes, Claire Danes plays the lead character.

RA: And she has, now, about five books. The thing that she has always emphasized is talking in pictures.

DT: I think the movie may have simply been called *Temple Grandin*.

DG: Oh, okay.

RA: Oh, you didn't know we were talking about Temple.

DG: Well, you couldn't remember her name. Remember?

RA: Well, that was in the truck.

DG: Now, you do.

[laughter]

RA: But, you see I remembered all those others. I've been showing him how good I was at remembering.

DG: Yes, yes.

[laughter]

RA: I was helping *his* memory.

DG: Yes. We're getting up there in age, so...

DT: It seems like Temple Grandin really epitomized the great profound value that animals and humans have in that relationship together.

RA: Right. She has a great relationship and understands and brings a great deal of not only knowledge but humanity to animal welfare and to our society.

DT: Wonderful.

RA: I just think she's the perfect person to be a spokesperson.

DT: Next time she comes to campus, I'd love to have the chance to...

RA: I often hear when she's coming, and I'll try and notify you...

DT: Great.

RA: ...and maybe even announce it.

DT: That would be wonderful.

[Extraneous conversation]

DT: Thank you for coming to meet with us today.

DG: So do you know Jim [James A.] Serpell?

DT: No, I don't.

DG: Isn't he at Pennsylvania?

RA: Yes. Well, actually, that's part of the history of CENSHARE. We got him here as a guest speaker.

DG: And he's British.

DT: Okay.

DG: Jim is at the University of Pennsylvania.

RA: Right. He holds the chair in Animal Welfare and what else? The exact name in human-animal bond... [Marie A. Moore Professor of Humane Ethics and Animal Welfare]

DG: He's in the news all the time.

DT: Oh, really.

DG: He's kind of become a regular spokesperson on the eastern seaboard.

DT: I'll have to look him up.

RA: A spokesperson for what?

DG: For animal kinds of topics, animal-human bond topics.

RA: Actually, in the last few years, he's become more involved in animal behavior than he was with the Center of Human-Animal Bonds.

DG: I picked up his name on occasion in national news. I said, "I know that guy."

RA: He does both. He's like many of us who have three, four careers.

DT: [chuckles]

DG: Just as an aside... You remember Sally Sweatt?

RA: Oh, yes.

DG: Do you know she was the owner of a dog that got the Best in Show [at the Westminster Kennel Club Dog Show]?

RA: Right.

DG: I couldn't believe it. They said the owners were Sally Sweatt... I said, "That can't be *the* Sally Sweatt..."

RA: Oh, she's been showing at that show for...

DG: Yes, I know but not with that kind of dog.

RA: Oh. Well, she's had several kinds of dogs. She's very big into the dog fancy and has been. That's how Ruth [Foster] got to know her.

DG: Sally Sweatt is heir to the Honeywell fortune, the Sweatts. She was a supporter of CENSHARE, at one point.

RA: Yes, at one point.

DG: At one point, right...not a big supporter but a supporter. We curried her.

[chuckles]

DG: She was the owner of the dog that got Best in Show at the Westminster this year. When I heard her name, I said, "That can't be the...Minneapolis."

RA: Ruth Foster was our entrée to her because Ruth Foster was the AKC, American Kennel Club... She's an honorary lifetime member of the American German Shepherd Club and several others, as well. She was, actually, associate director for CENSHARE here.

DG: It was Ruth and RK that invented the Gentle Leader[®] [head]collar.

DT: Yes.

DG: You're already familiar with that.

DT: Yes. The first thing I ever heard about Doctor Anderson was that he co-invented the Gentle Leader[®].

DG: And the Gentle Leader[®] is in the Smithsonian [Institute's National Museum of American History] in the last hundred years best inventions [in the "Inventions at Play" exhibition].

RA: The thing I like is it's with Post-it Notes and Velcro, all in the same exhibit.

DG: Ohhh, really?

[laughter]

DG: Okay.

RA: And they say it's because they are useful and everyday items that people can use. They're not so esoteric. And we appeared in the centerfold of the University of Minnesota Foundation's report one year. On one page was a woman with a dog with the Gentle Leader[®] on it and, on the other page was a picture of atoms flying through the air and all this physics. I said to the editor, "How come we are both in the centerfold? You have this common thing like a Gentle Leader[®] Headcollar here, here you this as an invention, and here you have all this esoteric science." He said, "Well, we had to have something that people would understand."

[laughter]

RA: Then, they put the Gentle Leader[®] on the Wall of Discovery [installation on the University campus designed to celebrate the discoveries, inventions, and creations of alumni and faculty of the University]. I'll have to show you that, the Wall of Discovery with all the discoveries, inventions. I said the same thing to them. They said, "Well, if you're good enough to be in the Smithsonian, you're good enough to be on the Wall."

DT: I would say so. You see Gentle Leader's® everywhere. I've used them before. My own dog doesn't use one, but dogs I've looked after in the past have needed Gentle Leaders®.

DG: What kind of dog do you have?

DT: I have a German shepherd.

DG: Oh, ohhh.

DT: Actually, when I told my friends that I had interviewed Doctor Anderson and that he was an animal behaviorist, they said, "Did you ask him about your dog?"

[laughter]

DT: He's a bit of a handful. I said, "I was too embarrassed." [laughter] He's too much of a handful.

RA: See, but if you had a Gentle Leader[®], it would calm him down.

DT: That's not so much the problem. It's that he can open the refrigerator. He can open any door in the house. He helps himself to things. He'll sleep on the coffee table and the dining room table.

RA: That sounds like my kitty cat.

DT: Yes. [chuckles]

RA: Doesn't it?

DG: And my cat, too.

DT: Yes, he followed the cats. The cats were there first and they did all these things.

DG: Ohhh.

DT: Well, they didn't open the refrigerator, but they did sleep on the tables. He grew up thinking that was okay. So I don't think the Gentle Leader[®] will fix that.

DG: How did you find your way from the University of Pennsylvania out to Minnesota, for Pete's sake?

DT: That was the job.

DG: A posted position and you applied for it?

DT: Yes, and it was ideal for me and I was fortunate enough to get it. It's a great place to be.

RA: We're glad you came.

DT: [chuckles] Thanks.

DG: How long have you been here?

DT: Two and a half years.

DG: Oh, quite a while then.

DT: It's a great place. I love Minnesota.

DG: I've been gone fourteen years and I'm back because my kids would never leave Minnesota.

RA: So his wife said, "We have to go back home."

DT: I see. Montana must have been a lovely place to live.

DG: Oh, yes. Oh, yes. My wife [Beryl] is from Montana, so this was traumatic, but it had to be done.

[Extraneous conversation]

So what kinds of questions do you have for us?

DT: I wanted to ask really about CENSHARE, how it was established, and how it was funded, what kind of things you did in CENSHARE, and what kind of support there was for it in the broader community and the academic community.

RA: Let me tell you about how it was established and funded and, then, he can tell you about the kinds of things we do.

DT: Okay.

RA: The work of the Center was established informally in about 1978, 1977, by Doctor Joe [Joseph] Quigley, and Doctor Stanley Diesch, and myself, and my former graduate student, Doctor Bill [William] McCulloch, who were all interested in human-animal relationships.

So we started a course at the University... [Doctor Garloff places item on the table: *Pet Connection: It's Influence on our Health and Quality of Life*] Yes, well, let's wait on that.

DG: Well, the names of the people I'm thinking of, like McCulloch and so forth. You can spell the names by looking at that.

DT: Yes.

RA: We started a course called "Perspectives in Human and Animal Relationships." That course was the first course in the country to talk about human-animal relationships. We called it "Perspectives" because it was so new and so different. We couldn't go in and say, "This is so. This is so, and this is so," but raised a lot of questions about it. Because, as you know, in 1900—you can look at our website; I wrote an article about what was going on a hundred years before—animals were strictly outdoors. Animals were not in the house. They were not in your bed and so forth for ninety-five percent of

the people. There was a small group of normally rich people who really took animals in or very poor people who took animals in. But they didn't get taken in. So we established this course.

At the same time, there was an international symposium in England that was held in 1979. That was the first international symposium—that was not a course; it was a symposium—on the human-animal bond. Then, the University of Pennsylvania, with Doctor Aaron Katcher and Doctor Alan Beck, started a center at the University of Pennsylvania—that's your alma mater.

DT: Yes.

RA: It was Human-Animal Interactions, I think they called it. So they put on an international program in 1981.

At that time, we decided we had to form a national organization and we inveigled the dean of Washington State University who had a program there called "[People]-Pet Partnership," where he was doing the same thing in terms of the human-animal bond and teaching writing for the handicapped and teaching that dogs were good in nursing homes and so forth. So he was elected president of the organization and a number of us, then, helped support that. [Doctor Leo K. Bustad became the first president of the Delta Society.]

Then, in 1982, we decided that not only should we have a course, which we'd started in 1978, but we should have a center here. So we went to the dean, Lee Stauffer, and the dean of the School of Public Health, Dean Robert Dunlop of the College of Veterinary Medicine, and to Vice President [V.] Rama Murthy. I think that's M-u-r-t-h-y, isn't it?

DG: Yes. I think it's in there.

RA: Okay.

They said, yes, they would give us money for two years. So they gave us, I think, \$40,000 or maybe \$45,000 that we could have each year for two years. Then, we had to become self-sufficient. That was how the Center to Study Human Animal Relationships and Environments was established at the University of Minnesota in 1982 officially. I want you to get in *officially*, because the University now has lots of centers and when budget time comes or anything else, they want to prune centers, and if they haven't been officially established, they're... [Doctor Anderson makes a sound like whoost]. So this one was offically established through the vice president's office and the two deans.

Now, again, we had to raise our own funds after that. Unfortunately, I and my colleagues were not the best fundraisers in the world, so we always were living from hand to mouth or mouth to hand. [chuckles] But we did use money from the royalties. The University collected royalties on the Gentle Leader® headcollar and they were split between the departments and the patent office, so we got money for CENSHARE through that.

Instead of putting it in the department, we put it in CENSHARE and that helped us have money to get going for the first ten years or so. That was a good thing that we could do with the funding from the patent royalties. That's how CENSHARE got started.

Then, we did get some donations, of course. The last one we got was for \$50,000 from a foundation, and that is now being used by Doctor [Judith] Garrard and her colleagues. I can't think of the name of the woman who is head of that project. She's in the School of Public Health and she has a big project that studies health problems in the population particularly in terms of cardiovascular disease and others. With CENSHARE, we like to do add ons. That way, we get the most for our money. So we asked her if we couldn't have her study, one small part of her study, ask questions about the presence of cats in the home and with the people and their relationships. So, for the last three years, she has been studying that and will finish this up, I think, in another year. We have another donor who is very interested in that, so she will be, hopefully, picking up some more money for her. So we will getting information on cats and their relationship with humans, which will be *very* good, because it will be a scientific epidemiologic study by excellent researchers who have funds for their big study from the National Institutes for Health [NIH].

DT: That sounds great.

RA: Now, in the meantime, we did a lot of things that David is going to tell about with CENSHARE. I will just say that when CENSHARE was established, I was going on sabbatical. That would be 1981-1982. I was going to the University of California to study animal behavior. I met David when I was going on a year's sabbatical to study psychology of learning, educational psychology. Then, this time, I went to study animal behavior and took a lot of courses in not only behavior but psychology, as well.

While I was gone, Doctor Stanley Diesch, who was the first director of CENSHARE, conceived and worked with some people to get some money to put on an international conference on the human-animal bond, which was done in 1983. That's the book there. He became the chairman of that and I was chairman of the Scientific Program Committee. He did the administration and I got to do the fun stuff of the science.

[chuckles]

RA: Then, in 1984 when I was back, I became director of the Center to Study Human-Animal Relationships. I retired from that or stepped down from that in January of 2011. So I was there for almost twenty-eight years.

DG: That's a long time.

DT: Yes, that's a long tenure.

RA: Again, we had lots of fun. We did a lot of things. David's going to tell you about all the things we did at the beginning—or at least most of them.

I would just say that we put on this international conference and we published a proceedings which is still in use and still called for...

DG: Pet Connection.

RA: ...and still really very good. I'm amazed, because there hasn't been other things done in the field as much as there should be. We had the top researchers and speakers from all over the country and even the world for the proceedings, which are called the *Pet Connection*." I'm going to give her a copy of that.

DT: Yes, I just took one.

RA: Okay. That was the big thing that got us started and got us known nationally and internationally. That was done in conjunction with—make sure and get this down—the University of California-Davis and what's the southern...? Riverside. Both campuses participated.

DG: Oh, yes.

RA: It's in the front of the book. Ben [Benjamin L.] Hart from University of California-Davis was my counterpart for the scientific part and a guy by the name of Winchester was the administrative head. [pause as Doctor Anderson looks for the full name.] Yes, William J. Winchester and Stanley L. Diesch, Minnesota Conference chairman and California Conference chairman.

DG: Where was he at? Davis?

RA: No, he was at Riverside.

DG: UC-Riverside. Oh. But they don't have a...

RA: Veterinary School, no. He was there and he was very interested, so he took it on. The Latham Foundation sponsored it. The Latham Foundation was located in Alameda, California, and therefore, they had connections with Winchester.

DG: I get it. Okay

RA: But I had the connection with Ben Hart. After we established CENSHARE, they established a center for the human-animal bond. What did they call it, David? What does it say there...where Ben Hart is from. [Center for Companion Animal Health]

DG: Uhhh....

RA: Anyway, it's another center. At that time, we had a center in Pennsylvania, a center in Minnesota, and a center in California, and a center in Washington State. Then, from

there, it grew until now, I think we have about eighteen or twenty centers around the country. There are some documents on that in the *Journal of Veterinary Medical Education*...about two years ago. I was going to try and get that for you, and I will, still, if I can it from the library.

DT: Good.

RA: But you have to remind me.

DT: [chuckles] Sure. I might be able to find it, as well.

RA: In there, we had a meeting at Purdue [University] and Alan Beck was the chair of that. He [referring to Doctor Garloff] knows Alan. Alan chaired that and brought us all together again, and we had some new ones, such as the University of Denver, which was the first one to establish an academic degree in terms of this field. I think they're actually not only giving an MS [Master of Science] but a Ph.D.

DT: There was a lot of communication then between the different centers?

DG: Yes, because of the Delta Society, which had its national conference, all these centers would come together, and exchange, and visit, and present, and things of that sort. That kind of like was a catalyst for doing projects and things of that sort. We went to the Delta Society every year. We used to host an exhibit and things of that sort.

RA: The nice thing there is that... You see this. I had a grant from NIH to keep funding for Veterinary Medicine, because they were going to chop it off. They asked us to study the role of veterinarians as they relate directly to human health and to justify all these millions of dollars for construction of veterinary schools, and so forth, and support of education from NIH to veterinary medicine, because Congress was saying, "Nooo, this is just for agriculture or animals. It's not for human health." I was the principle investigator and my colleague, Leonard Schuman, who was chair of the Department of Epidemiology in the School of Public Health, was my co-investigator. Then, I had another co-investigator who was an educational psychologist. His name was Fenderson, F-e-n-d-e-r-s-o-n.

DG: Doug Fenderson?

RA: No. D.A. Fenderson. He was in the Medical School as a psychologist.

DG: Yes. That's Doug Fenderson. I knew him.

RA: Fred?

DG: Douglas.

RA: Oh, Douglas, yes. Yes.

DG: He was the director of Continuing Medical Education.

RA: Okay.

DG: He came to us from Sister Kenney [Institute].

RA: He was my co-investigator.

DG: Ohhh.

RA: I got to know him.

DG: He was in Washington [State University] for a while.

RA: Yes. He was willing to serve as one of the co-investigators and I was, so we competed against all the places in the country that really wanted this. [laughter] And we got it and we put it on. This became the bible for what veterinary medicine could do. The reason we got it, I think, was that we proposed... You couldn't have real good hard data on what the role was. So we decided what we should do is get a blue ribbon commission. So I went to all my friends in Medicine, Dentistry, Engineering, all that sort of thing, Environmental Health, and asked them if they would serve. We got the top people from Nursing and so forth to come in and serve on a commission here. As a result, we took their judgment based on the data that was collected in here, you see. But it had to be put together and somebody had to, then, make a judgment. So they made a judgment, so we could go to the NIH and say, "We fulfilled the requirements of the contract." This was wonderful to get all these people together.

My graduate student, Bill McCulloch, had a brother who graduated in psychology from the University of Iowa. He was an M.D. at the medical school. So he was an M.D. psychiatrist. He went into practice in Oregon. Bill McCulloch said, "This man really knows animals and loves animals and he should be on this national committee." I said, "But he's a young man. He doesn't have a gray beard."

DT: [laughter]

RA: He said, "Well, but he is knowledgeable and he is a psychiatrist. We need a psychiatrist on this who knows animals," because that's the key. We actually together appointed Doctor Michael McCulloch as the psychiatrist on that committee. He did a wonderful job. He actually wrote one of the chapters, which was the first chapter, the first real treatise on veterinarians and their role with the human-animal bond. If you'll look at Chapter 11, you'll see that this was the first thing that was ever really published in terms of veterinary medicine and the human-animal bond. He decided that it was a triangle. That's why we lead from Delta Society that it was a triangle. Here was the veterinarian, down on this end was the animal, and down this side was the family, and then between, so it was a triangle of human-animal-veterinarian...that delta.

When the commission had finished their work and we were all through, we had the last meeting. The two Mc Cullochs were here because Bill McCulloch had been a consultant for us. Bill and Mike and Stan Diesch, who was the first director of CENSHARE, and Joe Quigley, who was one of our graduate students in Public Health who helped start the course in human-animal bond perspectives... Let's see, that would be McCulloch and McCulloch, Anderson, Diesch, and Quigley, the five of us decided that we needed to have a foundation. We wanted a foundation to raise money. We had a society which you said was founded in 1982, I think...1981.

DG: The Delta?

RA: But it wasn't called that. It was called the Human-Animal Bond Society and so forth. We established the Delta Foundation. Doctor Michael McCulloch was the president. He flew into the airport out here, the University airport. We each put up a check for a hundred dollars and he took five hundred dollars back to Oregon with him...incorporated the foundation as the Delta Foundation. Now, this is in a court proceeding. Later on, fifteen years later, a group in California was infringing our trademark, so we had to go court. All the documents had to be brought forth. We are now legally established as the founders of what became the Delta Society. We started as the Delta Foundation and, then, morphed into the Delta Society with Leo [K.] Bustad as the president, and Mike McCulloch as the vice president, and our woman as the secretary treasurer.

DG: Whose name I'm losing.

RA: [chuckles] Okay. She was a very close associate of...

DG: Linda...

RA: Yes! Linda Hines. There, the two of us together are doing good this morning.

DT: [chuckles]

RA: She was the associate, at Washington State University, of Leo Bustad, and she was a ball of fire, and she was a fundraiser, so that really helped to get the building. The five of us have our names carved on the side of the Delta Building in Renton, Washington, as the founders of the Delta Society. That was how the Delta Society... It all came from this and the chapter in here that Mike McCulloch wrote that said, "Veterinary medicine, people, and animals are a delta."

DT: That's great.

RA: That's why I had to bring this for you. You can read stuff in there.

DT: Yes, I will. That's great. Excellent.

RA: That will help you to know what they said. What made the real crux of the thing that got us the money was that they said that veterinary medicine and human medicine are inextricably bound and you cannot tease apart the functions. So... [Doctor Anderson claps his hands] That was a good thing.

DT: That's great.

RA: That part is my part of the Delta Society. Now, David was in on this from the very beginning and he was a mastermind at what I should call resources in education and videography, which was new at that time.

DG: Let me just kind of describe some of the products that we produced.

DT: That would be great.

DG: Early on in the 1980s, I was like associate director of CENSHARE for education. In as much as CENSHARE positions itself as a neutral forum—that's important—for discussion of value-laden topics in the human-animal bond... Should we use animals for food? Should we do research on animals? There are lots of issues and controversial aspects. CENSHARE wanted to do the research and act as a neutral forum and educate people to make their own decisions.

RA: Science based.

DG: Yes. In that vein, we entered into producing a lot of educational materials that people could use.

We had this course that Doctor Quigley had started way back and it was a very well attended course subscribed to by many different health and non-healthcare students. We took that course and we made it into a video course. We made forty-eight programs. It was rather innovative at the time, because we didn't just do programs, we went live on sort of a... Remember Phil Donahue?

DT: Yes.

DG: We did a Phil Donahue format where we had an audience in the studio, and we had an audience on the Saint Paul campus, and we had an audience in Rochester [at the Mayo Clinic] by way of cable. We had a panel and people come on, on a topic like animals and religion.

RA: We had two professors on each. David, you were the moderator.

DG: I was the moderator. The one on religion... We had a Buddhist monk. We had a conservative Protestant. We had a Catholic. We had a Jewish rabbi...Rabbi [Bernard S.] Raskas, as a matter of fact, who has now passed away. Then, after their initial little talks,

we would open it up for questions, and, then, I would hand the microphone to someone in the audience, and I would take questions from Rochester, take questions from Saint Paul. We videotaped it and, then, we marketed these videotapes. I know every week, we would do four programs for a semester. So we did four forty-five minute programs a week. It was quite an undertaking.

RA: Ohhh... [laughter]

DG: We didn't have any money. We didn't have any money! We just bootstrapped the whole thing, pretty much.

RA: Well, all our participants were free. They were volunteers. We all volunteered. I know I did two or three of them.

DG: We had some well-known people who happened to be in town or something like that.

RA: Right, and we had top professors in the University from all departments.

DG: Yes. I remember we had a futurist who was in the College of Education. We had a psychologist who was Gail [Peterson]. It was very powerful.

We packaged these videotapes and we marketed them. In my department at the Health Sciences Learning Resources, we had a marketing distribution program. So we marketed them for CENSHARE and it brought in a little income, but it got out and fulfilled this mission.

RA: What was the title of it? On Earth Together, as I remember.

DG: I don't remember anymore.

[chuckles]

RA: Yes, it was On Earth Together.

DG: Something like that.

RA: We actually have some brochures somewhere—David, you don't have them, but we've got them here—that gave the outline...

DG: Of each program.

RA: We can dig those up. Ask for those. That was the first course ever given in the U.S. that really focused in.

DG: Yes.

RA: And David was the mastermind. [chuckles]

DG: Then, we did some other conferences and they were all very interesting conferences. There was this one conference that we did where we sold subscriptions to satellite feeds. So we did a conference here in Saint Paul on the Saint Paul campus and we uplinked to a satellite and anyone who paid for the... It was two hundred dollars. We must have had twenty receiving sites all over the country. Then, they were able to ask questions, too. So we had panels of experts on the subject of the use of animals for food and fiber.

RA: Which was a hot topic.

DG: In fact, we had police standing around just in case we had demonstrators.

One of the interesting things in this conference that we did was that we asked the animal rights person to take the role of a meat manufacturer. We asked the meat association—I don't know if it was the Beef Association—people to play the role of an animal rights activist. Then, we had them in front of the audience to do a news conference and take questions from the journalists in the audience who were the audience participants. It was a real *risky* type thing, but it went over just fantastic. So we did some rather innovative kinds of delivery and fulfilled this mission of being a neutral forum for the discussion of the topics. Then, we packaged them, got them out in the community at large nationally.

Then, we produced a whole other raft of educational products. One series was on nursing homes, introducing different companion animals in a nursing home.

RA: Ruth Foster was very instrumental in that one.

DG: We did a program on how to handle a live-in cat, how to have a visiting dog, how to have a live-in dog. These were all in sequence. How to have a rabbit in a nursing home.

DT: [chuckles]

DG: Yes. They're up there [Dr. Garloff is referring to a bookshelf containing several of CENSHARE's videos]. So we marketed those, too, and sold those all over the country. Because there was some research that had been done in nursing homes, we were able to sort of bring that result of research into these programs. Like the incidence of that little study that was done at all the nursing homes in the State of Minnesota that showed that there's more disease carried by people visiting people in nursing homes than there is having animals visit. It makes our case for having these kinds of things.

RA: Could I just stop you there? You asked about Phil Arkow this morning.

DG: Yes.

RA: When he [referring to Doctor Garloff] spoke of our studies in the nursing homes, those are published in two volumes by Philip Arkow, A-r-k-o-w. They're about four or five years apart in the 1980s, I think. I have the references here somewhere. It's in my bio. [chuckles] The key is that he was able to publish for us what we found the first time. Then, it was very interesting to look at what we found the second time we did the same similar study about how they were handling and the rules and regulations required for animals in nursing homes. When we started, nobody in the U.S. would approve animals in nursing homes or hospitals. That would be unthinkable. What we showed was that, informally in surveys, fifty percent of nursing homes had pets of some kind in some way. We said, "What happens when the inspectors come?" They said, "Oh, they just belong to one of the staff members or we put them out the door and they're not in the nursing home. They're out in a car or somewhere. So it's no problem." "Don't you have all kinds of disease? Don't you have all kinds of injuries and so forth?" They said. "No." So, we actually did a study and I reported the summary of that at the National Institutes of Health's conference. We were able to say that it was more dangerous to have people than it was to have animals in nursing homes.

DT: That doesn't even test the benefits of having the animals there.

RA: Right.

DT: That's just getting rid of the negatives.

RA: Just the health aspects, just the injury, the accidents, and so forth.

The other thing was that we didn't want to use the word accidents. We wanted to use the work injuries, because it's very different. Accidents can mean you drop an iron or you break a glass or whatever. But injury is something that happens to an individual or an animal. I learned that when I was a graduate student at the University of Michigan School of Public Health. We did a study on injuries associated with pregnancy—no, accidents in the home. Most accidents occurred in the bedroom. We said, "What kind of accidents?" Most of them were pregnancies.

[laughter]

RA: That was on the sample. We had to change our definition. We said, "What kind of injuries occur in the home?"...not accidents. Definition is very important.

DG: So we did a whole raft of products. I think the important thing is that we tried to translate results of research into an educational realm, so that it makes use of the results of that research *beyond* presenting it at a conference or in an article that doesn't get exposed to the general public. I think that's one of the key goals that CENSHARE had and that was to raise awareness and show how good science can have an impact on your behavior with animals. We went along with that until the early 1990s.

RA: Until you left.

DG: Until I left, yes. Then, I don't know what happened.

RA: Well, we ran out of money, and we didn't have a leading spirit to do it, and I was retired at that time, so we didn't have anybody to really do it. It wasn't until 1998 that we were able to hire Paula. In 1998, we hired Paula Camarath and she came back.

Where's those big books? We have some—oh, down here—8½ [inch] by 11 [inch] volumes that she did on a number of things. She got back to doing things with the public and putting out stuff as outreach. As Gail [B.] Peterson said at our last meeting before we decided to change to just research, "We became famous for being famous."

[laughter]

RA: Gail is very good, very pithy in terms of his descriptions.

She [Paula Camarath] was on the Internet all the time and really did a lot of good stuff to get people aware of what was going on. She is a ball of fire and now that she has her master's degree, I hope that she will go on and do something in this field if she can get paid. Somebody has to be able to pay her. The problem with this field is getting paid for the effort of the work that is done.

It's like we have... It's on the Internet. It's about nature and nurture and how animals help people. Two women, one a psychologist and one a sociologist, started it. They've now got it up and going so we can give you that information. We helped to get them started. They are now putting on courses and they're able to charge for those courses. The human service agencies are paying for them, because they now have evidence that these things work. It's like Green Chimneys [Brewster, New York] and many others. We now have courses here where they take people and work with animals and actually treat conditions that they have. It's very, very good for them. That got started in 1999, 1998, and really was pushed.

We actually put on a conference—we have a book on it—in terms of how we can facilitate pet therapy. It was not a national but a regional conference. We had all kinds of professionals. It was for professionals only. So we had professionals doing it. It wasn't Visiting Dogs or anything like that. This was actually therapy with animals.

DG: One of the products that would be, perhaps, interesting to you as an historian would be that we did this video production on death and bereavement. As part of that production, we did a little intro piece on the way people coped with the death of their companion animals back in the early days of colonial time. What we did is we went out to the farm out near Valley Fair. What's the name of that recreated farm? [The Landing, Berger Farm]

RA: Which one?

DG: It's out near Valley Fair in Shakopee.

RA: I don't remember.

DG: It was a slideshow. We shot it out there and we got diaries of these people that left talking about the loss of their animals. We sort of dramatized that. It was really an interesting shift then to how it was during the very utilitarian days of winning the West, so to speak, to today and how people in urban settings have dealt with the loss of their animals or that it hasn't changed. That was, I think, an interesting portrayal.

We had some research. Ralph Holcomb, at that time, had done some research with...

RA: He was a graduate student here at the University of Minnesota.

DG: ...kids who were in 4-H and how they dealt with the loss of their farm animals and how there's a different reaction at a certain period in their teenage years that changes, this preteen to late teen. In between, there's this other thing.

We were able to sort of bring those pieces of information out in these educational products. I think that was a very clear example of transitional to the common public about some of these things that are done in universities that don't get a lot of exposure. I forget how many things we produced like that, but we did quite a bit.

RA: And actually conferences. I thought what was so good was that he not only did one satellite conference, but he had a number, as I remember, of conferences where he put them up on the air by satellite.

DG: Yes.

RA: We had some universities participate, not just going...

DG: Oh, yes, we did one with Art [Arthur] Kaplan. Do you know Art Kaplan?

DT: Yes.

DG: He's at the University previously. Well, he used to be here.

DT: Previously, yes.

DG: Art was one of our speakers on the use of research animals. He did it *free*, which is saying something.

[chuckles]

DT: Yes.

RA: Well, he was a client of mine. I could twist his arm.

[laughter]

RA: See on behavior, he had a pet that I had to go out and help him with.

DG: He did a great job. That was all on the satellite, too. I know we had some other universities that participated.

RA: For example, the University of Iowa did and Iowa State.

DG: Right, right. We had Massachusetts, the guy from Mahtomedi. What's his name? He was out at Mass. Cornell [University]...was Cornell?

RA: Yes, Cornell did.

DG: And [University of] Wisconsin, I think.

RA: Right. You're correct.

DG: So we had some really leading universities participating in these things. I think it really did a lot for us. I only wish we could have seen more ways of capitalizing financially.

[chuckles]

RA: We weren't good financial people. We should have been good fundraisers. The first thing we should have had was to have a fundraiser, but we had David who gave us the thing to produce stuff. I want to give great credit to him for everything that he did for CENSHARE in terms of producing products that would be useful for the public, which was our job and not just for the public but for students, because we were primarily trying to help students both undergraduate and graduate.

That's why we had the course, and, by the way, the course ran until 2009. We actually put it on as a joint project of the School of Public Health, the School of Veterinary Medicine, and the University school. What do you call it?

DG: University College.

RA: Yes, University College. We used to give credits.

DG: The other interesting thing about... You often hear people mouthing interdisciplinary education.

DT: Yes.

DG: Well, CENSHARE was truly interdisciplinary. We even had a Latin teacher as our speaker for the death and dying series. I mean, he did a great job. It wasn't just interdisciplinary from the standpoint of experts in veterinary medicine or public health. It was all over the institution. We had Ellen [S.] Berscheid from psychology. We had Gail Peterson from psychology. We had the College of Education with the futurists. We had everyone we could think of involved. Bill [Doctor William] Rempel from animal science

RA: Right.

DG: We had [Richard D.] Goodrich from animal science. We had every conceivable tie in the University to bring in expertise and authority to what we were doing. You don't see that often. You do not see that. Maybe in the Medical School, interdisciplinary means that Otolaryngology works with the Department of Medicine. Well, God! that's really interdisciplinary.

RA: [chuckles]

DG: This is the whole University and not just from the expertise but from the services point of view. We had the University media resources. At that time, it was over in Rarig Center. If we could get the Music Department involved, we would.

RA: But, see, they closed down those resources.

DG: Yes, they closed down those services.

RA: They gave us all those tapes and, now, they're either thrown away or stored, part of them. They're on old ways of doing it and it costs more to try and transcribe them...so we can't even save them.

DG: Yes. I will tell you that this University, during the years that I was here, was halcyon in terms of its vitality and productivity. When I came here in the 1970s, we did wonderful things. I have no idea what's going on now, but I *hear* that it's really tough times. They're always saying to me, "David, the place has changed." [chuckles] I don't know if that's because the money has dried up or what. But leadership is really important. Leadership is really important.

RA: And that comes from a dean [referring to Doctor Garloff] at Montana State University. [laughter]

DG: You know that leadership.

Who was buying the products?

DG: Humane societies, other universities, people in Australia. We had people contacting us from all walks of life, actually. It depends on the title and the product.

DT: In the cases with the live-in rabbits and live-in cats, nursing homes were buying them?

DG: Nursing homes, yes.

RA: And in terms of the *Pet Connection*... I might get Paula to come over if you're still interested in even more, because while we were selling some of these things, she was good on the computer and could pull up a sampling of the kind of things that we sold to. We have stopped selling the last few years, because it cost us more to get them out and handle them and have somebody here in the office when we didn't have a fulltime person to do it than we could gain from the sale. People were really sad when we said, "No." So what we did with the last few was, we said, "We'll send them to you free. Just don't expect any service on it."

[chuckles]

DG: We had a website up. My instructional designer who, maybe, you knew. You've been here three years?

DT: Yes.

DG: Pat [Patricia] Rizzi is her name.

RA: Oh, she was tremendous

DG: Yes. She was involved with the CEN lab, I think, later in her career after I left. Wasn't that up on the fifth floor, too?

DT: There's the Learning Commons up there.

DG: She was involved with that, too.

DT: Oh, okay.

DG: She was my instructional designer. She produced the website for CENSHARE.

RA: Right. Not only did she produce it...

DG: She kept it up.

RA: ...she kept it up. We haven't really done anything to it since she left.

DG: These are all co-opted services from people who believe in what CENSHARE is about.

RA: I think if there's anything you could say is that CENSHARE existed on co-opted services from people who believed in the concept and who wanted to bring science to this new and burgeoning field of looking at what people and animals coming together could mean for health and happiness in the population.

DG: Again, that exemplifies why leadership is so important, because unless you have that leadership, it's not going to come together. It just isn't. So if you're interested in giving leadership...

[laughter]

DG: ...here you go.

DT: It is incredible that you had, basically, volunteers...

RA: Oh! It was all volunteers.

DT: ...sharing their time and resources.

You had their buy-in. What CENSHARE was doing, how was that received by others within the University and also by the people who were using your products?

DG: In the University, I think as long as it didn't cost them...

RA: [laughter]

DG: ...and if they could contribute their expertise... I know that the TV production facilities invested thousands of dollars of donated service. They produced the trailers for the video course. They did all kinds of things for us, because they saw that as their mission, too, not necessarily because they saw CENSHARE particularly, but they saw it as a mission and that we were a client of theirs—I was, at least. So they received us very well.

RA: He was very persuasive with the media. That was what really counted, and he had the expertise and the knowledge to know what to ask for, and how to ask for it, and who to ask for it.

DG: My degree is in audiovisual education. Well, don't call it that on paper.

DT: [chuckles]

DG: Call it instructional technology. That sounds more highfaluting.

DT: I wondered what...

DG: Instructional systems technology.

RA: That's what he called it when he was dean.

DG: Yes, right!

DT: I wondered about that. I looked up what your Ph.D. was in. I was going to ask what that meant.

DG: That's what it means. Indiana University. Indiana was a mecca for people in that field, so I had the best training in that area and it was people-oriented and production-oriented. It wasn't theoretical. It was get-it-done stuff. That makes a big difference, you know.

So we take that here. The University of Minnesota... Before I came here and I was at Minnesota, they said, "David, watch out. That's a very high research order. They aren't going to be receptive to education." I said, "You've got to be kidding. They just haven't had someone in there fussing with it and finding ways of rewarding it." Like what we do with the animals, we find ways of rewarding faculty for doing education. I don't know that that always has been the case. That's why we started the sale of products for faculty, because it functions as a recognition that they can use for getting tenure.

DT: That's interesting.

Your educational philosophy and the outreach that you doing with CENSHARE, you were also doing that in the health sciences Learning Resources Center, as well?

DG: Yes.

DT: So you were doing this for others, too?

DG: Yes. Not on as grand a scale.

RA: He was just doing CENSHARE on the side. [chuckles] He was paid for the other.

DG: We had small grants programs for faculty to do educational development modules, usually products of some kind or another. See, the idea is unless it's product-oriented, it doesn't ring right. You have to have a product. Just to have a publication is not quite enough when it comes to educational development. It has to have something tangible to it. So I always push the media, always, even a paper. We had proceedings for the food and fiber. Didn't Helen Fairnie do that?

RA: Yes.

DG: She did a paper for it. We never got it out. I don't think we ever got it out.

RA: Well, too many things we didn't get out.

DG: Yes.

RA: But we do have some of them.

I wanted to mention this that since 2000, we have not been doing outreach and public service in education, because we didn't have money. So we took our money and husbanded it and we said, "We will give one grant a year up to \$10,000 to graduate students and their advisor," in order to get them to do something on the human-animal bond. So each year, since then, we've had about six graduate students that we've supported and doing projects. It was research projects in terms of these various subjects. One of them you might think was esoteric. We did one on bushmeat and why this happens in terms of Africa. The student was studying over in Africa and here, as well. We did one on urban chickens, urban poultry, because that's a big problem. We actually produced...and New York City actually used our publication on carriage horses and how you regulate regulations for carriage horses.

DT: Hmmm.

RA: Saint Paul and Minneapolis were having a real problem and big radio...and fights in the newspaper and so forth about how you can't have horses on the street. You can't do this. It's dangerous and so on.

DG: Right.

RA: So we got an expert group—our specialty was bringing together experts to get real facts and research—and we put out a publication for cities to follow and use in terms of what are the reasonable and suitable and science-based regulations covering carriage horses and carriages in cities. As I said, New York City actually asked for a copy of that. [laughter]

DT: They have a lot of horses there.

RA: Yes. That was the kind of thing that we were doing in terms of bringing together groups. We had a lot of support from the Minnesota... Is it Minnesota Horse Association? [Minnesota Horse Council] They have a big thing at the State Fair and so forth. They really loved it when we went into carriages and, then, later, when we were doing things on riding for the handicapped. We did a big thing supporting, and supported for years, riding for the handicapped.

DG: Right, right.

RA: In fact, Joyce [Catharine "Trina" Joyce] who was the head of it, called me here just a year or two ago and said, "I finally saw your name somewhere and remembered how we used to work together." [laughter]

DG: We did a lot of things. I had forgotten all about the horseback riding for the handicapped.

I'll tell you what, if I was in charge today—and I'm not—I would really take off on the environment side of CENSHARE. Think of the name: Center to Study Human-Animal Relationships and Environments. There's so much that I think needs to be done in the realm of farm and environment, conservation, development, land use, water use, and so forth. That whole realm really is just itching to have something...

RA: We need to get you together with our Institute for the Environment.

DG: Yes—I think there's a takeoff there—and be the neutral forum for discussions on those issues. There was a show on public television last night about Minnesota waterways. I don't know if you saw it?

DT: I didn't.

DG: It was talking about the streams that are getting polluted and all the runoff from the farms and stuff. I'm thinking, well, I just came from Montana where they were talking about water rights and all these other things. It is an *impending* problem with the encroachment of humanity for developing, and it's taking up all the farmland. Farmland is diminishing. There are smart ways of operating. We need to get those kinds of discussions on the table talking about it. CENSHARE could do that under their mission. I betchat here is money there for it from someplace

RA: You've got to have money. That's the one thing that CENSHARE has never had, you see?

DT: Given how effective CENSHARE's model was for outreach and making these products, did the other centers that were in other parts of the country start following your example?

DG: No, we were the only ones that put out a lot of educational materials. They put out occasional...

RA: You might look up the one at California, because they went into doing things that were related to bibliographies particularly, and that sort of thing. Lynette Hart was head of their group, so you might look that up in terms of that.

DG: UC-Davis is where she is.

DT: Yes.

RA: Yes, she's one of the other authors of *The Pet Connection*.

The University of Pennsylvania was a leader for about three years, and, then, they lost funding. Their psychiatrist went somewhere else and their person who—he wasn't a veterinarian—really worked well with the veterinarians, Alan Beck, went to Purdue University, and Purdue has had one of the stronger programs and still has been doing research over the years with interdisciplinary and is a good example of interdisciplinary research there.

Then, we've had some other individuals who've taken off, particularly from the social sciences, who've really tried to produce things in this area and do some science-based, evidence-based looking at the human-animal bond. I give great credit to them for that. We've had a researcher from South Africa who worked at the University of Missouri as a visiting professor, who has done quite a bit and published his work on it in terms of the human-animal bond and what it does for both people and animals.

Then, there have been others that have had local programs, such as you just mentioned, Green Chimneys for residential programs for children. We've had Helping Paws here and many other programs like Helping Paws where we train dogs for working with the disabled, handicapped, and so forth, nursing homes. We now have big programs for nursing homes all over the country. Delta Society is the best example. They have something like 6,000 pet/partner teams. You might put that down as an outcome of what CENSHARE started, since Delta Society was founded here at the airport. [chuckles]

DG: And the Delta Society would take our materials and distribute them for us. When we went to the Delta meetings, the national meetings, we always had a booth. I don't remember seeing other universities with booths that had as many materials as we did.

RA: They didn't produce.

DG: They didn't produce. That is what needs to be done in a center at a university. That fulfills the university mission. I suspect that they're all under the gun and so forth, and there are all kinds of egos involved.

RA: [laughter] He's been around.

DG: So I know how it works. You have to have that in order... In answer to your question, I do not know. I've been out of the field for a couple years here, so something may have happened, but I haven't seen it. I'm sure you would have mentioned it to me, if it had.

[laughter]

DT: You mentioned Helping Paws. In that situation where you're training animals to go into homes and to work with disabled people...

RA: Let me tell you how that started.

DT: Sure.

RA: That started as a research project here, because, again, we wanted to be science-based. So Ruth Foster had access to training people and dogs and I had access to University people. We teamed up with Physical Medicine. We got two people from Physical Medicine to work with us to start the project. We were going to look at how we could best team people and animals to work together on a scientific basis, not just, do you like dogs and want to do this and so forth? We had a family who really wanted to join us and work with us, so they were the first guinea pigs, you might say, when we were getting started. Unfortunately, both the people from Physical Medicine became ill. One of them had to retire and one of them had to quit.

DG: Who was that?

RA: I'm trying to think.

DG: Tom Anderson? No?

RA: I don't remember. Ruth might remember. Anyway, they were only with us for about a year.

We were going to disband the program but the family who had started with us was so eager that they said, "Let's incorporate it and make it a viable 501-c3 nonprofit. So it was incorporated as Helping Paws with no University connection, even though we were the ones that founded it and started it. Then, Ruth and I were both on the board of directors for a short time. I had to get off because of other commitments, but Ruth stayed on for a while. Then, the trainer that we had from the beginning decided to become the executive director and she was very good. She, Eileen Bohn, is still...

DG: Ohhh, I remember Eileen.

RA: Right, Eileen Bohn is now the director of Helping Paws and has been for the last twenty years. She has been the guiding spirit and a leader.

DG: Right.

RA: She actually got them into raising their own puppies and doing all these good things. You ought to interview Eileen Bohn, because she has really got a history. We have her in videos that we made for animal behavior purposes in CENSHARE, because she was one of Ruth's trainers, you see. She has really done a great job with Helping Paws. They now have a very excellent board, and they have been able to raise funds, and they have moved up in both the ranks of funding and number of people they can serve, and that has really made a contribution to our community. Unfortunately, it wasn't enough.

Fortunately, there is another organization in town called Hearing Ear Dogs and Hearing Ear decided that, hey, this isn't being fulfilled. This is an area that we have some expertise in, so they now, also, do dogs for the handicapped, for the disabled.

We're very fortunate in this area to have two organizations that actually are working with providing dogs, training dogs for people with disabilities. I think we have produced more dogs for people with disabilities than any other area of the country.

DT: You produce dogs and train dogs that can go beyond Minnesota, that they can go to families elsewhere?

RA: Yes, right. I don't want to say we do—I don't. It's Hearing Ear Dogs and Helping Paws.

DT: It's a national effort.

RA: Right. They can go anywhere. Absolutely.

The key is that they started here and local people do the training and local people do most of the funding; although, they do get some, I think, from the people who love what they do nationally in terms of that. Eileen Bohn would be the person who could really tell you about...

Although we started here, we were the cradle for so many things.

DG: Who was the woman that used to do, was it, visiting dog therapy?

RA: Right.

DG: What was her name?

RA: Just a minute... It was coming to me and then you kept talking. [chuckles]

Actually, we had a reunion with our friends from Australia who spent...

DG: Helen Fairnie?

RA: Right. Helen Fairnie and her husband came here a year ago and stayed at the hotel down on the strip and invited all of us back, the friends that they knew.

She's [referring to the woman who did visiting dog therapy] from Saint Louis Park [Minnesota]. Why can't I say it? Anyway, she was one of the first persons to do visiting dogs when Delta...the idea was just getting started to do visiting dogs. She and Joe Quigley really worked hard on visiting dogs trying to get it organized, and how you do it, trying to prevent some of the abuses of it, and to do it as scientifically as possible. Again, I ought to call Ruth, because I think Ruth would remember her name.

DG: Today—not that you're interested in today; you're interested in the history—CENSHARE is headed up by Doctor Judy Garrard. I don't think she's in the country right now, but she has a psych background.

RA: Oh, she has a Ph.D. in psychology. She was in the department here, which was disbanded or put into... The School of Public Health agreed to take three or four of them into the School of Public Health and integrated them into the faculty of the School of Public Health. She was very good, so she moved up the ladder, and she is now the senior associate dean, or was until recently, for the School of Public Health for research and did a wonderful job. She's been a fan of Gentle Leader[®] and CENSHARE and so forth ever since 1983-1984 when she tried one of the first Gentle Leaders[®].

DG: What did they have? A Springer spaniel?

RA: Right.

DG: Yes, I remember.

RA: The first Gentle Leaders[®]... In fact, she actually gave us a trademark name for it as the Good Dog Collar, and we actually trademarked that and used it for a few years, but you've got to stick with one...

DT: Yes.

RA: ...at least for a small group, so Gentle Leader® is what we went with. It was interesting that she was with us in 1983 and is coming back to us today in 2011.

DT: That's great.

How many people did you work with within CENSHARE? How big was CENSHARE?

DG: You have to understand that this is all voluntary.

DT: Yes.

DG: But the advisory board of CENSHARE was very large. We must have had twenty people here and there.

RA: Well, the official advisory board was, I think, ten people.

DG: Ten people, okay.

RA: *But*, we had all kinds of people who we brought in and gave them, should I say, jobs and titles and so forth. They loved it. We really involved, I would say, a core group of about thirty people that we could call on.

DG: Nobody was paid or was being paid from other sources for our things.

RA: Oh, they were paid, but they weren't paid by us.

DT: [chuckles]

RA: We co-opted their services, because they liked what we were doing.

DG: For instance, I would ask the vice president, who was my boss, "Is it okay to work with CENSHARE?" "How much time does it take?" "Oh," I'd say, "ten percent of my time." He'd say, "Okay, yes, sure. Go ahead and do that."

RA: Those were in the days of easier money.

DT: Right.

DG: Yes.

DT: It's really an incredible story. I don't know how different it is today, but just to have this notion of a center where people volunteer, because they're committed to the goals...

RA: Yes.

DT: And that there are these products produced.

RA: You see we had Joe Quigley, who was my graduate student. He got an MPH [Master of Public Health] in public health, but he *really* was interested in the human-animal bond. So when we started CENSHARE in 1981-1982, he wanted to get in on that. He was just finishing his MPH, so he actually came and manned the office. He was in the office every day from about nine-thirty or ten until three or four in the afternoon.

DG: Was he not retired...?

RA: He was a retired Army colonel. He was retired from the U.S. Army, and he was a colonel, and he came back to school to get his MPH after he retired.

DG: He served in World War II, in the Korean War, and the Vietnam War. I don't know how old he was by the time he came here.

RA: I don't know that he served in the Vietnam...

DG: Yes, he said he did.

RA: Oh, okay.

DG: He said he had three...

RA: But the point was that he came to us in 1982.

DG: Oh, okay.

RA: So that's why I'm not sure how much Vietnam War...

Anyway, he took his MPH, which took him a year, year and a half. Then, he went on to volunteer, because he wanted to. He was the one who came to the office every day. Ruth Foster, who was director of training for Twin City Obedience Training, came to the office every day. She wasn't here as regularly as he was, for as many hours as he was, but she was here. She had a lot of other volunteer... She was a good volunteer in a number of things.

DG: We had a work-study student all the time.

RA: Right.

DG: That was the staff. That's it.

DT: Wow.

RA: We had a secretary; in other words, somebody to do the typewriter, answer the phone, and so forth. The two of them held down the fort. I was here part of the time. David was here part of the time. We had others who were here part of the time. Again, it was all volunteers, the people we could call on.

We had this friend Fairnie, a woman veterinarian from Australia, who'd been president of the Australian Veterinarian Association and actually put on...the organizer of the World Veterinary Association meeting in Australia. So she had some real organizational skills. She, now, just got her Ph.D. here about five years ago. [chuckles] I got to be one of her thesis readers, because she did part of it here with our group in the School of Public Health...

DG: Ohhh.

RA: ...in terms of occupational health. She came and worked with us something like eight winters. She would come to the office from nine-thirty in the morning until five at night, and she would work all the special things and so forth. She did it for four months of the year when it was their summer in Australia. I said, "Why do you come here in the winter?" "Because it's summer in Australia." [chuckles] She was free, because she was a professor at Curtin University and taught the human-animal bond courses there. She was tremendous. She helped organize that animal welfare thing and did so much for us, David. She was a ball of fire.

DG: I still hear from her.

RA: These were the kinds of people that we had who would give their time and effort and really cared. It's like the woman he was talking about that started for us, for CENSHARE, the visiting dog project, taking dogs to the homes, and to nursing homes, and so forth. Then, from there, we got into making videos and showing how to really do it on a large scale and so on.

DT: That sounds wonderful. It's incredible that you had that many volunteers.

RA: Again, this was something that was just coming into being. If you'll look at what I wrote in the "Last 100 Years of the Human-Animal Bond" on the website, I think it details some of that growth and interest. If you go back even as early as 1940, 1945... I became director of Veterinary Public Health for the City of Denver in 1947. Because of a rabies outbreak, the commissioner of health said, "You have to take over the animal control and the animal shelter in Denver," which I ran from 1950 to 1956, as well as being director of the Veterinary Public Health program. In looking at the human-animal bond then and comparing it with now, the difference is night and day. For example, then, all dogs ran free. The citizens of Denver had legislation that you could have a referendum and the citizens of Denver in 1953 decided they wanted to have a dog leash law. Well, of course, talk about fireworks.

[chuckles]

RA: You really had it. When they asked me I said, "I don't care, as long as you'll fund it." I went to the city council and said, "Now, remember, if you're going to get this on the ballot, and if it's going to go, it's going to cost money." They said, "Well, okay." We told the people who were pushing it, "You're going to have to pay taxes to fund this thing, because it's so controversial." The way I got around most of the problem was that I said we would only pick up...

[break in the interview]

RA: ...dogs at loose, running at large, where there was a complaint. If anybody called and said, "You picked up my dog," or "You did this..." or "You gave me a ticket," or whatever, we'd say, "But we have a complaint. If your dog was causing people problems, you need to be..." But, we didn't bother anybody where there wasn't a complaint. You know, that worked beautifully.

We actually had the support of the population for our rabies vaccination program, which was the best in the country. We actually wrote an article for the *Journal of Public Health* on Denver's rabies vaccination program, because we had ninety-five percent or better vaccinated. We did that because when I was at the University of Michigan, we worked with the statistics department on how to do a sample population study of a city and I got the Bureau of Business and Social Research at the University of Denver to do it and the

city council of Denver to pay for it. We actually had, by census, tracked the dog population of Denver. So we could tell how many we had vaccinated in each census track and how many were not vaccinated. They would make out a slip, get a tag. It worked beautifully, because all they had to do to get registered was to be vaccinated. We took out all dog license fees. We threw away dog licensing. That made people what? Happy. So, therefore, people were supportive and we had businesses, all the department stores... If we had a blue tag this year, a red tag next year, they would have manikins in the windows dressed with blue and showing blue tags and telling people. We always vaccinated during the months of February and March, so in February and March, they'd do all the things to support our rabies program. They'd have women with handbags carrying big tags on them and so forth. [chuckles] It really worked beautifully. So we got, as I said, ninety-five percent. It was statistically accurate, because we did it on the basis of a population study, the only population study that has ever been recorded of a dog population in any city the size of Denver. I did that as a project for my MPH.

DG: What's your time?

DT: I've asked all my questions now. If you...

RA: I just want to say that David has so much to share. I think if you two want to get together at any other time, you can. That would be wonderful. But I'd like to take you to lunch sometime here when you're ready to go. You're familiar with the University more than I am, more than David is. You know some places, some good hangouts.

DG: The closest is Sally's [Saloon and Eatery]

DT: There's Sally's and, then, there's a Vietnamese place across the street from there, as well.

DG: There used to be the [Village] Wok, as I recall.

DT: Yes, that's still there.

DG: Is it really?

DT: I haven't been in there, but it's still there.

DG: I haven't been there for a while. Down the street at the corner, there used to be a Chinese restaurant.

RA: Oh, it's gone.

DG: It's gone?

RA: On that triangle?

DG: Yes.

RA: Yes.

DT: Bona [Vietnamese] is a Vietnamese place and it's next to either Dominoes or Papa John's [Pizza], whatever is on the front side of...

RA: But they did; they tore that down.

DG: Oh.

DT: Yes. There are all kinds of tearing stuff up. But Sally's is still there, that's for sure. [chuckles]

DG: I knew it from years back. It was called the Improper Fraction. Do you remember that? The place where Sally's is used to be called the Improper Fraction. I thought that was such a cool name.

DT: Yes.

[chuckles]

RA: I think it's a cool name now.

DG: Yes, I do, too.

DT: They should have kept it.

DG: Now, it's Sally's, a drinking bar.

DT: Yes.

RA: Let's say it this way... What I think is that you and I need to get together and go over this and some of this. Let me just finish up with this.

DT: Okay.

RA: This is related to... This is the *Pet Connection*. That's from the library.

DT: Right.

RA: You may have that. I gave you that one...

DT: Yes, you did.

RA: ...so I can give this back to the library. This is the one where we were talking about the University of Michigan one.

DT: Yes.

RA: I checked it out. This is the one on brucellosis, the National Technical Commission and I checked them out.

DT: Okay.

RA: As I said, we spent a lot of money...the U.S. government. We spent a lot of professional and other time and wrote up volumes of stuff. The industry and the others involved weren't willing to go down and take our recommendations. So instead of eradicating brucellosis in three to five years, we finally eradicated it in about 2005, at the cost of *millions* and millions of extra dollars, because people would not accept the recommendations.

[extraneous conversation]

DT: I can read this and, then, I can return it to the library for you.

RA: Yes, right, if you would.

DT: Yes, no problem.

RA: You can look at this and return this.

DT: That would be great. Thank you.

RA: My part in it is the requirements... Committee on Professional Education.

DT: Okay.

RA: If you want to put that...

DT: Yes. That would be great.

RA: What we did is we set up the standards for professional education. I, at that time, was a young buck.

DT: [chuckles]

RA: I had just come to Minnesota. So I was a member of that committee. That was my part in this symposium. But that was the first one that was really recognized by a major university and put on by a major university in terms of the One Health comparative medicine type of thing. It's been talked about for a long time. It was talked about back

by the early physicians in the 1870s, you know, and 1850s. We had [Louis] Pasteur and we had all the other good biologists and physicians that talked of One Health and did One Health. We had [Edward] Jenner and so on. That was vaccination from animals to people, all those good things. But this was the first one to ever try and put some science behind it and say what we were really doing.

In those days, there was a journal called *Diseases Transmitted from Animals to People*, [correctly, *Diseases Transmitted from Animals to Man*] and we now say, "between animals and people," because we get it going both ways, unfortunately, because of our close association, you see. It was written by [Thomas G.] Hull, H-u-l-l, the author. He listed, I think, something like forty-three diseases transmitted between animals and people. Now, we have over three hundred that are recognized. But it was forty-three when I first got into the field in 1947, right after World War II.

DT: That's a big increase.

RA: Well, right now, all the new ones and the big ones that come out are all zoonoses. That's why the Center for Disease Control has *really* employed a lot of veterinarians.

What you need to know is that program that I was telling you... I want you to be sure and interview Will [William] Hueston and the associate dean from the School of Public Health, Deb [Debra] Olson about the dual degree, MPH, DVM [Doctor of Veterinary Medicine] program and the summer institute. I think those are two of the most innovative things since CENSHARE.

[laughter]

DG: I know I visited last year, the School of Public Health, and I brought a bunch of people with me from Montana. We had lunch with John Finnegan [Junior]. I asked him, What's happening with Veterinary Public Health?" He said, "Oh! that's a real big thing nowadays. That's one of our biggest growth areas," blah, blah, blah.

RA: Well, this because of...

DG: What comes around goes around. [chuckles]

RA: I give great credit to Will Hueston. That's why I want you to interview him. He, now, has a chair funded by Cargill [Incorporated] in *global* health.

DG: His name is familiar. Is he in the Veterinary School?

RA: Oh, yes. He's a Ph.D. veterinarian. He's a veterinarian, DVM, Ph.D., and he graduated from Ohio State, got his DVM...

DG: I must have met him.

RA: ...and he was an associate dean at Virginia Polytech [Polytechnic Institute] at their Washington [D.C.] office or Washington branch.

DG: Was his wife helping teach?

RA: His wife helped teach our course.

DG: That's it.

RA: Pamela Jean Hueston.

DG: Yes. That's who I met.

RA: She taught for five years, six years. Then, she said, "Look, you promised me that I could go back home and raise dogs for..." What? The handicapped.

DG: Ohhh.

RA: So, she's raising pups in Virginia, where they both grew up, for the handicapped. Since he travels so much, he's home in Virginia as much as he would have been home here. He's doing a tremendous job here with his chair in global health and food safety.

DG: Got it.

RA: I really think that you need to see how this thing has grown.

DT: Absolutely.

RA: The School of Public Health...they don't have a professor like I was, fulltime in the school, but they have a lot of people who react and interact together, which I think is even better with Will as the leader. He holds a position as a professor in the School of Public Health, as I did, but I was fulltime over there the last half of my career, and he is only part-time, you see. He's so busy traveling around the world now that he...

DT: I'll definitely try and track him down at some point.

RA: He'll give time. He's very generous, again. He gave me time to have lunch and we went over a number of things I wanted him to do for us last week.

DT: I will look him up.

RA: He's here always in June for the interim session between the spring quarter and the summer session.

DG: Are you still on the quarter system here?

DT: No.

DG: You're on the semester system.

RA: Right.

DG: Yes, they switched before I left. I was on the committee that made the switch.

DT: [laughter] Well, thank you for that switch.

RA: I think it has really helped a great deal.

DT: Yes, I think so. I'm glad for the semester.

RA: Yes. I consider the quarter system old fashioned and inefficient, but that's only my view.

DT: Excellent. Thank you. I can return that to the library for you so you don't have to carry it back.

RA: Will you? All right. I will give you these and I will trust you with this.

DG: Who did you say was head of the biomedical library?

DT: Linda Watson.

DG: Linda Watson. Where's she from?

DT: I don't know. I'm not sure how long she's been here. She's been here since I've been here, but that doesn't mean much.

RA: If that's too heavy for you

DT: No. It's fine. And that one, too?

RA: This is the only copy I know of.

DT: Okay.

RA: So this is my contribution to the veterinary profession. [laughter]

DT: A very valuable one.

RA: And this is how CENSHARE, the human-animal bond, got started. This is the first article that ever connects veterinarians...and that's by Michael McCulloch.

DG: Didn't you do a consensus thing, too? I remember that you were talking about doing an NIH consensus report.

RA: Now what is a consensus report?

DG: That's so we can get funds from NIH. You have to have a consensus study so that you qualify as an area of research.

RA: Well, we did that, yes, but it didn't go over as well as we wanted. That's where I gave the research on how pets were safe in nursing homes, that it was safer to have pets than it was to have people visit in nursing homes. I gave a summary of that research. The nice thing is... Here is the bibliography.

DT: This is great.

RA: We actually documented and I think that's the beauty of it, that it's documented. Then, Michael's study, I think is the last one. No. Emergency medical services. See, every chapter is documented.

DT: That's great.

DG: Michael is no longer with us. He was shot by a patient [on June 26, 1985].

DT: Oh, goodness.

DG: With a shotgun in his office.

RA: Here's Michael's... You might write this down. Michael McCulloch is Chapter 9. It's called "Contributions to Mental Health." [pause] Ohhh!

DG: Have you ever run across the name [Robert W.] Bob ten Bensel?

DT: Yes, I run across his name a lot.

DG: He was active with CENSHARE.

DT: Okay.

RA: He's in here.

DG: In fact, he got into research at cemeteries. He used to make talks in cemeteries.

[chuckles]

DG: Yes, he was early on one of the...

DT: Is he still in Minnesota, do you know?

DG: He passed away. He had Alzheimer's, early Alzheimer's.

DT: That's too bad.

DG: A pediatrician.

Did we get John Brenton with CENSHARE? I don't remember.

RA: Oh, yes. Sure, we did. We actually had him as a lecturer. Not only that, but he was a lecturer in the course,

DG: Did he do a TV thing?

RA: No. He did the course over in the Veterinary School. He'd come over as one of the ten, eleven lectures that we gave.

DG: What did he talk on?

RA: He talked on animal and human and he talked about beetles. That is what I remember, but, not from a psychologist's standpoint. You see the psychology... He said, "Remember that beetles are going to take over the earth."

DG: [chuckles] Right. Okay.

RA: That was what he was busy talking about.

He's [referring to Doctor Michael McCulloch] got all kinds of good references. That was the start of Veterinary Medicine's involvement with the human-animal bond.

DT: That's great. I've got lots of good reading material then to keep me busy. [laughter]

RA: Well, you're not going to read all of it, but there are parts that you'll want to highlight...

DT: Sure. Absolutely.

RA: ...in terms of that and some of the people. But, I think David's point is that a field that could get so much volunteerism and a field that had people so charged up and passionate, you see, about what was going on and that we could co-opt... That's how we did it. People couldn't believe that we didn't have paid staff. Well, now that was a weakness, a big weakness. We'd done a lot better if we'd had paid staff. Again, it was also a strength, because we...

DG: It made for carrying on the organization. In other words, when RK left, I left, Ruth left, it just fell apart.

RA: We had a couple people who tried to take over and do some things.

DG: Right, yes, but it wasn't the same.

RA: And they didn't have the relationships that we had throughout the community and the University, you see. That was a nice thing. Ruth had the community relationships, David had all his good relationships, and I had academic relationships and community relationships with the veterinary profession and others, medical professions, and David with the educators and producers of products. [laughter] So it really helped.

DG: Do you ever go back to England?

DT: I haven't been back in several years, unfortunately.

DG: Okay. Did you go to school in England?

DT: I did...the University of Manchester.

DG: Ohhh, okay.

DT: I studied biochemistry there.

[Extraneous conversation]

RA: Oh, I need to explain this. When I said I was going to step down, I started the process early. We started talking about it in the summer of 2009. I didn't actually step down until the end of 2010. But, we had a meeting of the people from the School of Public Health, people from the Veterinary School and myself. We met over at the Veterinary School. Of course, what happened was all the veterinary groups attended and only one from the School of Public Health attended.

DG: Ohhh, really?

RA: Well, only Judy Garrard came to the Veterinary School and myself, since we were both Public Health faculty.

They asked me for some historical background, so I gave some examples there just off the cuff. I gave you, probably, better information.

Let's see... Yes, in 2007, we stopped the Pet Perspectives on the Human-Animal Bond, because the Veterinary School offered to provide the funding. Before that CENSHARE had collected the tuition. In other words, the Veterinay School paid us, the University

College paid us, and the School of Public Health paid us so much for every student that attended the course. They wanted to collect the money, but they didn't provide the...

DG: Support.

RA: Of course. That was 2007. You've got that documented.

Then, they talked about future strategies and goals. Gail Peterson was going to coordinate that committee, and, actually, it never really got off the ground.

This is a project. We've got a number of them in there. This is one of the projects that CENSHARE funded. This is the last project we funded. It was an international project with Paraguay through the Global Food Safety Program. We did this—what should I say?—out of wanting to help get this kind of program rolling, because I worked for the Pan American Health Organization in Latin American for twenty summers. I have close ties with them, so I sort of fudged; this really wasn't human-animal relationships per se, but if you're going to look at food supply, it is human-animal relationships and it is public health.

DT: Yes.

RA: So this needs to go in wherever the others are. The only person who would know that would be the secretary, which would be Bev Teslow.

DT: Okay.

RA: She knows where all this stuff is, because she was the secretary the last five years. She came in four hours a week, but she hasn't been coming in since Judy... Judy is hoping to get a graduate student, I think, to come in.

[speaking to Doctor Garloff] But I'm hoping you'll talk with her and I'm hoping you'll become a volunteer again.

DG: From Lindstrom...

RA: Well... You don't have to volunteer but one day a week. That would get you out of there.

[laughter]

DG: So I stop saying, "You betcha."

RA: No, so that you would help to change us, so we could all say, "You betcha."

[chuckles]

DT: I take this one, as well?

RA: Yes.

DT: I'll return these.

RA: Again, they're not mine. They really need to go where there's safe keeping.

DT: Sure.

RA: I trust you to get...

DT: I can get them to the right place.

RA: Remember, there's lots of good stuff here that we need to look at. I probably should come in and look at some of it and pick out some that might help you.

DT: That would be great.

RA: Then, there's stuff up there. But, see, those are all David's.

DT: I'll have to bring in a video cassette player and watch some of these.

DG: Pat Rizzi was the instructional designer for all of those, I think. We had a scriptwriter who was on our staff at that time. She ended up adopting a rabbit. The scriptwriter got a rabbit and Pat got one of the cockatiels, one of the birds.

RA: She also had a dog, because she had me as a consultant.

DG: Yes, she had a Jack Russell terrier.

RA: I went out and consulted with her several times for behavior problems.

[laughter]

DG: Yes, I can imagine a Jack Russell behavior problem.

And you have a German shepherd.

DT: Yes.

DG: Boy, they are across the board in terms of behavior.

DT: He's super smart. He's too smart for his own good. We've done a year of classes with him and he does all these commands and tricks. He knows how to do the right

thing, but chooses not to sometimes, or chooses to go beyond what a dog should really do. [laughter]

DG: I have a good friend who was a biochemist who was from England.

DT: Okay.

DG: He went to college in Aberdeen in Scotland.

RA: We also did some research with my graduate students.

DT: Yes, I see.

RA: Well, we're going to go to lunch.

[End of the Interview]

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