

**National Institute of Nursing Research  
Oral History Project  
Telephone Interview with Dr. Ada Sue Hinshaw  
Conducted on April 22, 2009, by Philip Cantelon**

**PC:** I'm speaking with Dr. Ada Sue Hinshaw on April the 22<sup>nd</sup>, 2009, and may I have your permission to record the call?

**AH:** Yes, that's fine.

**PC:** Thank you. I'm getting some comments back on the chapter that concerns you, and I wanted to go over some material and see if you can help me with some answers.

**AH:** Okay, sure. I've read the last one that we did. I've read only one of them. I don't have both of them.

**PC:** Well, I've done three now. You read the first one?

**AH:** Uh-huh.

**PC:** Okay. What I did with the first one was split it in half, and kept Doris Merit on her own, so it's leading up to her. The second chapter is on her, and the third one is you, and that's the one under discussion right now. They didn't give you that one yet, huh?

**AH:** No. I haven't seen any of them, the chapters. What I've seen is just our transcript.

**PC:** Oh, okay. Well, I have no idea who they are sending these to.

**AH:** No, I don't either, so that's fine.

**PC:** Okay. Well, anyway, one of the discussions that you and I had earlier was on the intramural program at, originally, NCNR. And I know it was a little different to have the intramural program, as I remember the conversation, for the nurses because the medical people at NIH didn't think that was possible.

**AH:** Yeah, they didn't understand nursing research well enough to understand what kind of research we'd do intramurally.

**PC:** Can you tell me, or help me out, what kind of intramural research that was initially?

**AH:** We started more with behavioral research, nursing behavioral kinds of research in the beginning. Carolyn Murdaugh was the individual who started that for us.

**PC:** That's M-U-R-T-A-U-G-H?

**AH:** M-U-R-D-A-U-G-H. She's the current dean now at the University of Arizona. She's the acting dean out there. Carolyn was there, possibly, a couple of years. She came in just specifically to help me build that intramural program. And I'm trying to remember,

Carolyn's work was in health promotion, cardiac patients. And she worked some with intramural people at NHLBI. And then she was involved with the Hawaii geriatric cardiac program that's out there. I don't remember the name of that, so I'm sorry.

**PC:** Well, I've seen reports on that, and Senator Inouye was interested in that, I'm sure.

**AH:** Yes. And Pat Dillion helped us to get connected to that project. So Carolyn was out there part of the time running that project, and she was doing, can't remember the project she was doing with it, but it was to look at some of the nursing care with elderly people with cardiac disease.

**PC:** And which national institute were you working with?

**AH:** National Institute of Heart, Lung, Blood.

**PC:** Heart, Lung, Blood. Okay. A second question came up that they would like to know more about your own research, I think both at Yale and then at Arizona.

**AH:** Oh, okay. I was less involved, it was the master's program at Yale, so I was less involved there, except that I was aware of the experimental research that was going on there with perioperative teaching and post-operative stress. And that was really more Rita Dewmoss's work. My own research work came out of my combination of sociology and nursing in my doctoral program. And I was primarily looking at work environments for

nurses as they impact on patient outcomes. So I had looked extensively and was funded for what is called an anticipated turnover study, which I was trying to learn how to predict when nurses were going to want to leave a work environment because of bad circumstances.

**PC:** I'm sorry, anticipated what?

**AH:** Anticipated turnover.

**PC:** Turnover, okay.

**AH:** Study. Focused on nurses. Looked at factors such as job stress, job satisfaction, group cohesion, clinical autonomy and control over nursing practice. Those were the major factors that we looked at in environments. That one was funded to cover, I can't remember exactly how many. It was multiple rural hospitals and multiple urban hospitals. So we had something like over 1,000 nurses that we interviewed and worked with in the urban hospitals, and somewhere around 7-800 that we worked with in the rural hospitals. They were all Arizona hospitals, and we were, essentially, working with the Arizona organization of nurse executives.

**PC:** Okay. And that became the basis of your dissertation?

**AH:** No, dissertation research was a one-time study. Now you can't say that to people, Phil, because I preach to doctoral students that they begin their research program there, and I didn't [laughter]. I, primarily, didn't because it dealt only with nursing decision making, and the complexity of nursing care. And I used that research later in patient satisfaction instruments to measure the complexity of nursing care. But I, actually, didn't go ahead with the decision-making piece model that I had in my dissertation work.

**PC:** So it was a modeling study?

**AH:** Yes.

**PC:** Actually, a couple people asked questions because they were very interested in that.

**AH:** Yeah. I, literally, have in my research career combined this work environment with nursing satisfaction safety, and then looked at patient outcomes in a very, very rudimentary way. We had done that. In all of those studies, I built middle range theories and tested those theories as part of those studies. Had a very close colleague who worked with me in that program, that whole research program, and that was Dr. **Jan Atwood**.

**PC:** Another question I got asked, and you may be forgiven for not remembering this, but when you were at Yale, I think it's pronounced Powhatan Wooldridge. And his colleague was Robert Leonard?

**AH:** Yes.

**PC:** And am I correct in saying that Leonard did not hold a doctorate?

**AH:** No, he did have a doctoral degree. He was the medical sociologist.

**PC:** He did have. Okay, because when I looked him up, he's only listed as a master's.

**AH:** Now that's funny, Phil. You know, I could've just assumed he did. Later, I worked with him at Arizona. He was a medical sociologist there on the University of Arizona faculty as well. So I just always assumed he did have.

**PC:** Well, I have tried to track that down because I have found Dr. Wooldridge everywhere, and Mr. Leonard, but when I looked at the book that was published in '74, he doesn't have a Ph.D. after his name.

**AH:** Okay.

**PC:** But somebody hammered me for not putting a doctor in front of his name, so I thought, well, maybe I –

**AH:** [Laughter]. He was so well-known to people who went through the Yale program. But if you didn't find one, I thought he was doctorally prepared, I have to tell you. But I don't,

you know, do I remember exactly? No. And you're clearly the one who's digging the good information.

**PC:** Well, you know, that's the problem with Google, and looking up books, and trying to find more on him. Robert C. Leonards, there are more of them than I care to –

**AH:** Oh, I bet, than you care to remember. This one taught both at Yale and Arizona, if that helps you any.

**PC:** Yes. I found him. But I didn't find what I thought I'd find.

**AH:** You found only a master's degree.

**PC:** Yeah.

**AH:** Interesting.

**PC:** Well, some people survive without. In my field, David McCullough's done just fine, thank you.

**AH:** I don't know, he puts me to sleep. [Laughter]. I do enjoy his books.

**PC:** The contributions, one of the aims that you had, I'm going back now to NCNR, one of the aims was to build up the science, clearly, and to get that started. And we talk about when the nurses, you gathered the group together in what, in retrospect now, has become CORP 1 in the terminology, which was the first to develop the five-year plan.

**AH:** Yes.

**PC:** A national nursing agenda. National Agenda for Nursing Research, right?

**AH:** Yes.

**PC:** I think is the formal term. And they came up with certain of these, I guess there were seven, but concentrating on five of them.

**AH:** Yes.

**PC:** Which, in retrospect, would you consider real breakthroughs were made during your period as the head of NCNR, NINR?

**AH:** I'm trying to remember those now.

**PC:** Low birthrate, AIDS/HIV, pain management, aging care.

**AH:** And symptom management.

**PC:** Yeah, symptom management.

**AH:** Yeah. Because, see, that was one of the early studies that really talked about symptom management as a field of research. Other people studied pain or fatigue or something else, but they'd never clustered them in the sense of symptom management. And that was, essentially, a new kind of cluster of studies that nursing began to evolve. I do not know whether they had also been looked at that way or studied that way in cancer. That would be the place I would be most likely to see that, but it was not a well-used term like it is today in terms of symptom management. That was a term that we pretty much coined and worked with in that sense.

**PC:** And tell me more about what that would consist of, for example.

**AH:** Well, all kinds of symptoms were studied under that. We were really looking at how one assesses symptoms, those processes for doing that, and the management of those symptoms. It comes off the base that nursing really deals with, what patients are having to respond to and handle, health and illness, rather than focusing on the health and illness itself. So rather than focusing on cancer or a type of cancer, we would focus on what is it that the patient's having to deal with with that cancer. Usually, that was pain and fatigue and hair loss and all those kinds of things. So we really use the term heavily, symptom

management, because that was much more our perspective, our discipline's perspective, on what was important in what we saw as our domain.

**PC:** And you get the same thing, for example, in HIV/AIDS, the same kinds of symptom management?

**AH:** Yes, exactly. We looked at care of people, prevention of HIV/AIDS, or we would look at care of individuals with HIV/AIDS. And if you're talking about care of, then you're talking symptom management again. That goes across any field.

**PC:** And yet, we talk about care of individuals. It seems that nursing research was also looking at community health issues, which I would call public health issues as well. For example, low birthrate and the behavior in young people.

**AH:** We probably put some of our largest amounts of money, of which we didn't have much, Phil, so we're not talking great deals here, but we probably put more money into low birth weight than any of those others in that first several years. That was a major problem for the country at the time, and so we were looking. One of the criteria for selecting those priorities was that it was a major public-health problem for the nation, and low birth weight prevention had been for some time. And we tried to get better programs by which people could prevent low birth weight infancy, or care for low birth weight infants. And we got some nice changes, particularly in terms of the education and education being able to be done in low-cost ways, like with telephone calls, etcetera. There were a couple of

studies we funded with one investigator, don't even remember her name now, in which, clearly, she got drastic differences between low birth weight infancy rates for women who had continuous telephone call contact and ones who didn't. And people often thought that you had to deal with education –

**PC:** I'm sorry, this is telephone contact with nurses?

**AH:** Yes. People had always thought that you had to do always face-to-face, and it's very expensive in that case. And, frankly, when it's extensive, it's hard to sell health care systems on doing it because it's so expensive. The fact that we could convert this and show that you could get some of the very same results with telephone calls instead of home visits made a big difference. It's the same way that we branched out into transitional care models, being able to take patients home early from the hospital. And you could do that as long as you had advanced practice nurses in that case, who made one home visit and then all the rest were phone calls. And we could take people home faster, cheaper, because we got them out of the hospital.

That's Dorothy Brooten's work and Mary Naylor's work. Mary is still doing that work. Mary is now in charge of, director of the Center for Transitional Care at the University of Pennsylvania. She's done all her work with taking elderly people home early after acute and chronic conditions. I think the last one was myocardial infarction, something like that.

**PC:** That's, actually, very helpful. I want to read you something because I'm not sure how to handle this. This is a comment that I got. "I disagree with the discussion," I wrote a piece, this will explain itself. "The discussion of how the perception of quality of intramural research affects the standings of institutes in the extramural community. I was not part of the decision process, but I do know that NIH's defense of intramural research relies on the importance of innovative and often long-term patient-oriented research as well as quality of basic research. I would wager that NCNR argued for an intramural program on that basis."

**AH:** We never argued for it. We just set it up and paid for it. I'm sorry. You don't have to clear it to do one. You just have to begin.

**PC:** Here's what I wrote, and maybe I'll get your comment on it, and then I'll feel more comfortable. I wrote, the paragraph starts, "The underpinning of basic science at NIH was its reputation for pioneering intramural research programs within the institutes and centers. Intramural research programs defined an institute standing in the biomedical world. The higher the quality of the program, the greater the reputation of the institute. Nursing, however, had no intramural program. Purcell asked Weingarten if he would support an intramural program for nursing, Weingarten demurred; instead, praising the center for its very soundly-planned extramural program. 'I think the center has come along very, very well, both during the period when we had a temporary director, and since Dr. Hinshaw arrived,' he said. 'Since NCNR's programs placed "a heavy emphasis" on developing collaborative work with other institutes,' Weingarten said, 'I think the

extramural program can grow over the years, resources permitting. But,' he continued, 'as a result, NCR does not need as large a staff as some of the other centers that have laboratories, since much of this is collaborative.' In effect, he told Purcell any intramural program for nursing was not a priority and would need to wait." Do you agree with that?

**AH:** I never heard that story, so I don't know that.

**PC:** Oh, okay. Well, this is what he said. This is what he told Purcell. This was in a testimony.

**AH:** Interesting. Yeah. I'm not surprised. You know, obviously, I was probably sitting right there and didn't hear that piece of it. What year was that?

**PC:** Let me look at my footnote and I'll tell you. The testimony is from 1988.

**AH:** That would make sense. We were all established in April of '86. We didn't even move for an intramural program until about 1990, '91. It was at least '91 because we were, I think, five years old before we started trying that. I don't remember having to get permission to start that program. Institute directors are extremely independent at NIH. If you've got the budget and you can pay for it, you can do it. My hunch is that what I did was start working towards one, figure out the kinds of research that we'd want to do and who might come to do that and, obviously, called on a well-known researcher, but a

friend as well, to come and do that, and probably talked it through with whoever is the director more than ask permission.

**PC:** Okay. Well, here I have something I said sometime later. Said, "Second major program initiative was AIDS. The center had established a new collaborative intramural research program on symptom management for AIDS program with NAID, and the NIH clinical center, department of nursing. This initiative marked the first time that NCNR would test the waters of intramural research at NIH, an area reserved," I wrote, "primarily for basic and medical research." They said cut that out and just put test the waters of intramural research at NIH, period. Then I said, "The AIDS collaboration was ideal for initiating an intramural research program for nurses because many Americans considered AIDS an epidemic as one of the major health challenges," blah, blah, blah. And then later, you would start your own that would not be a collaborative effort.

**AH:** No.

**PC:** And then not much is said after that.

**AH:** Although we linked with a number of other institutes for our intramural program. But we did that consistently, as you know, really both to increase our resources under something as well as get the richness of the science that was already there and was developing.

**PC:** Okay. Good. I had another question. How would you define the difference, or separate nursing research from public health research?

**AH:** Some of public health research is nursing research, and vice versa, okay.

**PC:** Yeah, that's what I have too. And the question was, can nursing research be teased out separately from public health research? If so, should be included here. If not, it should be noted that nursing research was one part of public health research, and that's really what I thought I was saying. So I'll just say one part of public –

**AH:** Or, in fact, yeah. It goes both ways because there are times when our community health nurses clearly are doing studies that have more to do with symptom management in the community, or have to do with working with populations and prevention of something. And it's simply part of and a type of. When you're working with symptom management, it's probably more separate, it's more nursing research, what you would call, but frankly, the two go so close in hand because we're very family oriented and very community oriented as nurses. So from our disciplinary perspective, we roll those two together very easily.

**PC:** Okay. All right.

**AH:** This must be interesting for you to begin to get all the questions back.

**PC:** Well, some of them I can answer right away, and some I just scratch my head and go, oh, my.

**AH:** [Laughter]. Different perspective, huh?

**PC:** Well, yes. Here's a note that I have. I said, "Early stages of nursing research, there was heavy emphasis on evaluation and study of clinical, I think I said cases, maybe care, health services research. They were not in translational science. That evolved later. Correct?"

**AH:** Yeah. The whole term translational science is much more recent. And research utilization is not that different, or research application is not that different from what turns out to be translational science. Translational science takes on different perspective. If you're medicine and you're really much more basic science oriented, translational science is clinical research. If, in fact, you're nursing and you're pre-clinical science to begin with, then translational science becomes the application of that practice.

**PC:** That's a little like a circle moving around. It's all connected.

**AH:** You got it. Exactly. It's really kind of weird because of that.

**PC:** In a briefing report that I found for Donna Shalala, there was a comment that they're looking at, it was the advances of nursing science, and it said in the 1970s, there was just

one journal for nursing research. By 1992, there were – '91, whenever this thing would've, well, it would've been '92 I guess they would've done this one, there were dozens. And I got the question on that, there were a lot more in 1975.

**AH:** Yeah.

**PC:** There may have been specific ones, but not for general nursing research, that is a professional peer-reviewed journal.

**AH:** There might've been specialty magazines. Nursing research itself started in 1952, isn't it?

**PC:** Yeah.

**AH:** And I'm trying to remember when we added the *Western Journal* and the *Research and Nursing in Health Journal*.

**PC:** Well, *Western* was before 1980, I'm sure.

**AH:** Yeah, I'm sure it was too. And those two were founded almost in the same year, those latter two.

**PC:** Probably in the 70s sometime.

**AH:** Yeah. I just saw that the other day in an article. I'm trying to remember where. Just a second. Let me see if they're in this set of articles that I have in front of me. There was one article that was going through this, and had a table on it, so let me see if I can find that table again. Yeah. Nursing research periodicals and first year published. *Nursing Research* was 1952. *International Journal of Nursing Studies*, 1963.

**PC:** Of *Nursing Studies*?

**AH:** *Nursing Studies*. That was one of the first, and few, international journals we had that carried nursing research from all countries.

**PC:** Okay. '63?

**AH:** 1963. The *Canadian Journal of Nursing Research* started in 1969. *Research in Nursing and Health* and the *Western Journal of Nursing Research* started in 1978 and 1979, respectively.

**PC:** Okay. So in the United States alone, in 1975, there was just one research journal.

**AH:** Yeah. 1975, yeah. Because *Advances in Nursing Science*, which is not so much research, it's more theories, didn't come about till 1975. The only other one before 1970, or '75, is *Communicating Nursing Research*. That was not a journal. That was a set of proceedings out of the *Western Society of Nursing Research*.

**PC:** Is that on a single page?

**AH:** Yeah, sure is.

**PC:** Could you fax that, or have Keisha fax that to me?

**AH:** Yeah, I'll have Keisha do that. Give me your fax number.

**PC:** 301-279-9224. You don't even have to put anything on it. I'll go up and watch for it.

**AH:** Good.

**PC:** That's really helpful.

**AH:** Yeah, it was helpful to me because I'd never seen it laid out like that.

**PC:** Okay. That will fatten the footnote, as he said. Don't use alliteration. Okay. The other thing I get hammered on is the success rate of the institute. And I know congressmen always ask you about it, you know, "What's the success rate?" And I have asked a friend of mine who is what I call the traffic cop at NIH who sends these things, the grant applications out, and I ask her to explain it to me. Now I'm going to ask you because I'm still lost.

**AH:** Out of all the applications you take in, how many do you fund? And that's the success rate, is my understanding. Now you have to remember I'm about twenty years away from this, Phil.

**PC:** That's all right. I'm talking about it twenty years ago anyway.

**AH:** Okay.

**PC:** So I don't want fresh information. But the problem is, you know, they say my discussion is a little disingenuous. It always tightens up for any institute with a substantial fraction of non-competing continuation grants. That is true, right? Because you only have so much money.

**AH:** Yeah.

**PC:** So how did you decide how many new ones to fund?

**AH:** We looked at the amount of money we had left over when we funded everything else already. If we wanted to fund a bit more than we could, then we had to cut the amounts that the continuing ones had. We didn't do that often because those grants were fairly small already.

**PC:** So you rarely cut the non-competing grants.

**AH:** We did. Later, it began to be much more of a trend for NIH. You know, if your whole budget took a 2 percent cut, then you cut all your grants by 2 percent. But it became more that consideration than anything else. But we also had, we had those that were continuing. Then we had the no-competing ones that were high scores, and then we had the priorities that were set aside, like prevention and AIDS and so forth. Prematurity and AIDS and so forth. And so much money would be put into projects that targeted those areas. Usually, I think we put about a third of the money into that.

**PC:** And AIDS got a separate funding pot, as I read it. Is that correct?

**AH:** Yes, it did. So then we didn't have to take that out of the larger pot.

**PC:** I think what the complaint is here is that the award rate for nursing grants, that is the number of awards versus number of applications, was 12 percent, less than half the award rate for the rest of NIH. This was in response to a congressman. This was 1991. "To achieve parity with the other institutes, NCNR would require an additional 10.3 million over the president's budget request. Being a young program," this is you speaking here, "Being a young program, we have been supporting a rapidly growing number of outstanding scientists who are now receiving non-competing continuations or previously-funded multi-year projects," and I'll explain. "As a result, she noted we are

using an increasing portion of our research project grant funds to support the non-competing portion of our portfolio."

Then you go on to say, "If additional funding were available, NCNR would increase the number of competing research project grants to match the NIH-wide award rate, add three centers and specialize in four exploratory centers, increase the number of trainees," blah, blah, blah.

**AH:** Yeah.

**PC:** So but they didn't like this, but I don't know how to explain it any differently.

**AH:** They didn't like it? What did they want to know? What did they want you to say differently?

**PC:** Well, they just said it's disingenuous, and I thought it was pretty much up front. I guess what they said was, you know, that the rate didn't match the rest of NIH's, but you didn't have the money the rest of the institutes had anyway.

**AH:** Yeah. That's very true, regardless. But, obviously, as you build a larger and larger pool of grants that are already funded, you're going to have less to fund on other new grants. So what you said is true.

**PC:** And for a new institute, this would've been an exceptionally keen problem.

**AH:** Yeah.

**PC:** Because all of them are relatively new. Okay, well, sometimes I just throw up my hands and say, you know, this is the best I can do.

**AH:** Yes.

**PC:** You know, you have to say at a certain time, well, that's the way it is.

**AH:** Yes.

**PC:** The other question, I've saved, I think, the most difficult for last. And that is in the period you were there, what of the programs that the institute or center funded did you think made the greatest breakthroughs in nursing science?

**AH:** Oh, that's a tough one, isn't it? Let me think for a minute how I would talk about that. If we're talking about the immediate breakthroughs while I was there, it would be the R01s that were being refunded, at last. People were having more than one funding cycle. Brooten, with her work, would be one example. The other that, in the long run, probably has made one of the biggest differences, and I don't think Pat Grady would agree with this, is the center's program, to be quite frank, because it grows and raises more scientists

at the same time that it produces science. And so it does double duty for you in a way that usually produces very fine scientists, but also research.

So if you think of people like **Peg Hicamper**, or you think of people like Linda Aiken, those people have been funded over and over. They're heads of big centers. They've raised, I couldn't tell you how many post-docs have come out of those areas. We never had post-docs before. I think we had two in the country when we started in '87, '86. So now we have a whole cadre of post-docs, people who really do know how and are well underway with research programs. And they have a lot better possibility for the future in that sense. But their mentors, by running these centers and producing them at the same time, have really added to the science in many ways. And I'm thinking of Aiken's work and, you know, Hicamper's work and Naylor's work with geriatrics, Lois Evans' work with geriatrics. Those people have really made a difference.

**PC:** Okay. Is there any particular report on that at all?

**AH:** On the centers?

**PC:** Yeah.

**AH:** No, there's a couple of pictures, which are fun. I don't know whether Jan still has hers. I do, but they're packed away in Ann Arbor, and I wouldn't know where.

**PC:** Jan Heinrich?

**AH:** Jan Heinrich. Purcell, early in the game, wanted to load more money into the center.

**PC:** Right, I have that.

**AH:** And the only way they can do that, congress people, is to start big new programs for you. My hunch is that's why he was talking to, or asking Weingarten that question at one time. About the time that Weingarten would've said no, I don't even remember that one, to the intramural program because he was absolutely right, we wouldn't have been ready for that. Purcell did put a chunk of money into start a center's program for us. So that started fairly early in the history of the center, the national center.

**PC:** Yeah, that would've been 1988.

**AH:** Right. Very early. But that was Purcell's way of trying to get money in there. And that program probably has had, because of its double function, has had quite an impact.

**PC:** Okay. So in that regard, you would say that's one of the impacts that the NCNR, NINR had on the nation's health outcomes.

**AH:** Yeah. If you look now at Aiken's work, which has guided health policy decisions in many states about what kind of nurse-patient ratios they've got to keep, not to get the patient mortality going up. That's a big impact on health.

**PC:** Nurse station staffing, did you say?

**AH:** Uh-huh. Aiken's work, essentially, looks at adequate nurse staffing, and then what that means for patient outcomes. We have over 81 studies now in the discipline, which indicate that if you've got inadequate nurse staffing, you get higher mortality and morbidity. Aiken's work went so far as to say you need to carry a staffing ratio that's not higher than four-to-one or five-to-one in terms of patients-to-nurses. And if you do not carry that, every time you increase your patient load by one, you will increase the death rate for that patient thirty days out from discharge by 7 percent. Published in *AMA, Journal of American Medical Association*, I believe.

**PC:** Wow, there's a switch too.

**AH:** Yeah, in the 90s. Yeah. Very, very potent work. California's laws for what kind of nurse-patient ratios they have to keep in their hospitals in terms of adequate staffing are based on that work. Magnet Hospital credentialing, when they look at hospitals that are going to be credentialed for Magnet status, they have to have that kind of staffing ratio. That's, again, based on Linda's work. So there's some real impact out there that's made a difference.

Another whole area of research that's been funded by NINR was the work with Virginia Tilden in end-of-life care. She's in some of the work quoted off the website on making a difference with NINR. I know Jenny, and I've read some of her work and have talked about her work, she looked at studies for two areas over a period of time. One was if you use advance directives, can you bring down the stress levels for families after a death, and can you shorten the grieving period? You can. That answer is yes.

She also looked at if you are able to have a health provider sign the advance directives, are they more apt to be followed through by other health providers who are taking care of that person at the time in the event of the death, and that answer is also yes. The Oregon State policy for improving the care of the dying incorporates that principle, that policy. And that's Jenny's work. RWJ's last acts, when they've tried to get the country to really look at using advance directives, they took a direct quote out of some of her work around the impact on families and lower stress and less grieving with advance directives.

**PC:** And she did this when you were at the institute or center? She began it?

**AH:** Well, some of this was started at the time I was there, Aiken's work certainly was, and I don't think Tilden started till later. But when you think of a discipline that's had funding for its research for, what, 23 years now, that's a very young discipline. That really is young. Before that, we had that 3 1/2 and 5 million per year for the whole country. So once we finally got nursing research adequately funded, which in fact, it's not even adequately funded now, in my own opinion, you know, for years, by the time I left there

in '94, we only had \$50 million. So we were funding very little research. And, yet, it's begun to make some huge policy impacts very quickly. I mean, that's very young. When I went to NIH, NIH was over 100 years old. Big difference.

**PC:** Well, this is very helpful, as it is each time I speak with you. I always learn a lot more. Well, I should, I suppose, but it's been a delight.

**AH:** Well, thank you.

**PC:** I do have one absolutely odd question to throw at you. It has nothing to do with this. But when I met the president of the Uniform Services University –

**AH:** Oh, you did?

**PC:** Yeah. Oh, this has been more than a year ago. I believe his name is Rice?

**AH:** Uh-huh. Charles Rice. We call him Chip.

**PC:** Chip? Yeah. He said the nicest thing of becoming president there was it was the first time he ever walked across a campus and was saluted.

**AH:** [Laughter].

**PC:** And I wondered if you saluted him.

**AH:** No. [Laughter]. We're both civilians, so the military might salute him, but they don't salute the rest of us. He is a three-star general, though, in that position, which really helps a lot.

**PC:** Well, it certainly does.

**AH:** Yeah, certainly. I'm only one star. I can't get away with that.

**PC:** That n ever hurts either.

**AH:** No, it doesn't.

**PC:** Well, thank you very much. Did we ever receive the interview back?

**AH:** No. I will send it to you now, okay, because I just did read it this last weekend, because I knew we were going to talk. I had a great time reading it. It was fun.

**PC:** Well, it's a terrific interview. You're very good.

**AH:** Oh, well, thank you. You're very good. Let's not forget who leads this team.

**PC:** Well, and I do hope we have a chance to meet sometime. I know we're just up the road or down the road, as the case may be.

**AH:** I hope we do too.

**PC:** Sometime when things are less hectic.

**AH:** Yup. We should go for drinks or something.

**PC:** Okay. Love it.

**AH:** It would be fun. Okay. I'm going to send you the first page of this article so you've got the author title and all.

**PC:** Oh, wonderful, yes.

**AH:** And then that page that has the chart on it. Okay?

**PC:** Thanks very much.

**AH:** Sure. Glad to do it. Bye-bye.

**PC:** Bye.

[End of Interview]