

**NINR History Project
Telephone Interview with Dr. Ellen Rudy
Conducted on June 16, 2008, by Philip Cantelon**

PC: I'm speaking with Dr. Ellen Rudy, that's R-U-D-Y, on June 16th, 2008. I have your permission to record the call?

ER: Yes, you do.

PC: Thank you very much. Prior to beginning the tape, we talked a bit about your involvement with initially the National Center for Nursing Research. Could you go back over and tell me a bit about how you first got involved I assume at Case?

ER: Yes. I was a faculty member at Kent State University, and then I took a position at Case Western Reserve University as chairman of their department, and Case, as you may well know, is a private school and its ambition was to be very research intensive. So when I was the chairman of the department, we were all urged and encouraged and pushed to do research grants. It was at that time that I put in a grant. I had been working with a group on endotracheal suctioning, and I put in a claim—

PC: I'm sorry. More slowly?

ER: I'm sorry. I was working with a group of people who were interested in endotracheal suctioning and severely compromised people. I put in a grant during that time, and I was

funded then in 1987 by the National Center for Nursing Research. I think what was unique about this, and it is an odd topic, endotracheal suctioning is—should I explain what an endotracheal tube is to you?

PC: Sure. Twenty-five words or less.

ER: Okay. It's a tube they put down people's throats when they can't breathe for themselves. For example, during surgery they'll put that down if they're going to have a long surgery. The beauty of the grant that we put in is we put four grants in together and we called it a national study group. One study was on cardiac patients who were on endotracheal support following cardiac surgery, one was a grant using an animal model, one was a grant using premature infants, and my grant was for head injury patients. So the four grants went in to the center, and all four of them got funded at one time, with also funding for an oversight—oversight at one place which was at Ohio State that the investigator at Ohio State, Dr. Kathleen Stone, was the coordinator of the group. I think that's the last time they have funded something like that, which was a group effort. I never did think it got enough publicity.

PC: Why do you think they funded it in the first place?

ER: I think it was because the coordination—we tried to use the common variables across four studies, which I think is an unusual thing to do. They do that with clinical trials, but

nursing wasn't used to that. Secondly, we had very seasoned investigators who had done quite a bit of work in that area. Two of the investigators had done a lot of work with animal models and endotracheal suctioning. And third, and I think this is probably the strength of it, nurses are in charge of endotracheal suctioning. Nobody tells us when to do it, how to do it, how long to do it. It's a nursing procedure, and it can have dangerous side effects and it can be very positive. So it was sort of in the domain of this is nursing. We didn't have to defend it, everybody knew that nursing did it, everybody knew that it belonged to nursing. And we were still at that stage where we were worrying about what was nursing and what wasn't nursing. Thank God I think we're past that.

PC: You mean nursing or nursing research?

ER: No. Just whether it's nursing versus medicine.

PC: I see.

ER: I think people are pretty clear what's research and what's nursing, but they fussed for a long time about is this medical research or is this nursing research, that kind of nonsense. I think we're past it. It's scientific knowledge development, and people are less concerned about who owns the knowledge than they were at one time. So anyway, I think that was the strength.

PC: Aside from Case's interest in promoting research among its faculty, what did the NCNR do to encourage the receipt of these kinds of applications?

ER: Well, I think in the beginning with the center—you mean when it was still the national center?

PC: Yes. In 1987 it was.

ER: Okay. The thing I think that they did as much as they possibly could to let the nursing community know that finally—I mean they went through all the regional research programs, the Internet wasn't as big then at all, but they did as much as they could publicity-wise to let the nursing community know that finally there was a place where nursing research would be welcomed, valued, and evaluated by nurse scientists so that we weren't in competition with basic scientists like biochemists, we weren't in competition with biomedical research, we weren't in competition with clinicians, physician clinician researchers. It promoted nursing. The beauty of it, truthfully, finally was you could actually do research—we had enough money to hire people to help you do data collection that we weren't all doing research on a shoestring. Nursing research had such a slow beginning, I believe, because we had no money. So we ended up doing way too many questionnaires and surveys and things that you could do cheaply because you had no place that would help fund your project directors, your data collectors, your analysts, or anything. And the center for nursing research just completely changed that. You could

fund research that was labor intensive, and you could hire the labor. I really believe that the clinical research is so labor intensive, you've got to find the patients, you have to get the consent form, you have to be there when the procedure is happening that you're interested in, and we didn't have the manpower to do that until we got funded. So funding, to me, changed the landscape of research.

PC: Did you play any role in getting the center off the ground in the first place?

ER: No, I did not.

PC: Were you aware of it?

ER: No, I really did not. There were other people who were the movers and shakers. I was not. I wasn't young, I got my Ph.D. when I was in my forties, so I was like a beginning researcher when the center was conceptualized and came into being, so I got my very first big grant from NCNR, and I was not in the group of people that got it off the ground.

PC: When you received the grant, this was in, when in '87?

ER: I don't have any idea. In my CV it says 1987—well, let me see. I guess I can look and see if it gives me a date, but I seriously doubt it. No, it just says 1987. I don't know when.

PC: Okay. What was the take from the nursing community on the NCNR in those days?

ER: First of all, there weren't that many places doing research. [Inaudible] in nursing were infantile at that time. There were a few places doing that. I think the take was this is grand for the people that got it, but it was early. It was very early in getting research going, and there were people that were so visionary. You have to give such credit to the people who thought ahead that this is what nursing research needed to move the science forward. Most of us were not—to tell you the truth, I was like, oh isn't this a grand idea, but I'll never have to do that. Well, then I landed at a place where you had to do it or you couldn't get tenure. So the environment in which you were in I think made a big difference as to whether you applauded or paid no attention to the center for nursing research. Today it's really an essential thing in schools that have Ph.D. programs to have funded researchers. At that time, it was just so infantile. We almost didn't know what we—and people who got a grant were like, oh my goodness, isn't this fabulous. You know, you got \$300,000. And today, don't even think that that's a big amount of money, because my first grant was \$309,000, and that was the total three-year budget. Now think about that. That \$100,000 a year. I thought I died and went to heaven. Today, they would say aahhh, that's not even enough to do anything.

PC: [Laughs] What was the outcome of your grant and how did NCNR handle the . . . ?

ER: I had a wonderful project director at the center. Everybody has program directors. Everybody that gets funded is assigned a program director that you turn in your yearly reports and so on. I think they were extremely supportive of investigators—very, very supportive of investigators. If I have any criticism ever of NIH in general, and NINR now, the program directors are very, very careful about what they tell principal investigators when you resubmit grants. They give you as little information as they can, they don't want to promise you're going to get funded, they don't want to promise you anything. And that culture drives me crazy, the culture of we can't tell you any information. In the very early stages, that's how the National Center for Nursing Research was. I mean they were delighted once we got funded, but when we wanted to resubmit, it was like that's fine, but we can't give you any information about how it's going to go or how your review was or blah blah blah. They're very closemouthed about that, and I think that's sort of a typical NIH response. But anything else at the center that we needed, they were very, very supportive. And they were very good to promote this national study group, which were four of us that were funded in the same arena. They were very good about helping us become known and do presentations and things like that.

PC: So they were trying to get both you better known and the center as well, I suppose.

ER: Of course. Yes.

PC: Who was your program officer?

ER: I think it was Pat Moritz at the beginning, and then it was Mary Leveck. Pat Moritz was the typical bureaucrat, don't tell you too much. Don't write that in your report. Mary Leveck was a little more open and much more, how do I want to put it, much more like she was a buddy to us.

PC: Is this L-E-V-E-Q-U-E?

ER: It's not Q. L-E-V-E-C-K, I think. They'll know because she was a deputy under Pat Grady for a while. And she was just a delightful, supportive, always supported the principal investigators, always encouraging. Pat Moritz was all business. This is how it is, do it this way, da da da da da.

PC: You mentioned a study section. Explain that.

ER: Oh God. Once I got my second grant, I think it was, I resubmitted after three years, and we did a second endotracheal suctioning grant. And sometime in the middle of there, I was appointed to the study section. I was a member of the study section from 1990 to '93. When did the center come into being? I mean the institute.

PC: I think in '91.

ER: All right, '91. So I was on the study section when it was still the national center. I was the second study section. There was a, what do you call it, a founding one, original, whatever they called it—

PC: Charter?

ER: That's it, charter. The charter study section, and I was in the second one, and I was on it for four years. It was a wonderful experience from two standpoints. One, you got these god-awful box of grants every quarter, and you were assigned to read a certain number that you were primary reviewer and then secondary reviewer and then discussant. You had to learn because you had to read other people's grants. It was a huge, huge burden in terms of time and energy, but oh my heavens, you really learned research by reviewing other people's grants. So the first thing was it was just eye-opening and it was a learning experience. The second thing was you learned what research was going on around the country. So often you get so isolated that you don't realize what other wonderful things are going on in the world of nursing outside of your own little domain, so it was just an excellent experience. And the third was just being on the study section is you got to listen to other people's critique, you got to see what they thought, and it made me a much, much better researcher, and I could go home—you know, you can't talk about what went on at the study section, but you can go home and say you have to pay attention to power analysis. Everybody does power analysis to come up with their sample size,

you cannot put a grant in. Eventually at Case I was promoted to associate dean for research, so I was helping everybody else do grants. So being on the study section really helped me.

PC: I'm sorry. Had to pay attention to what?

ER: I had to pay attention to other people's grants, and then once I was a director of research, I had to help other people get them.

PC: Right. But you said you used a term "para," and I didn't quite hear it.

ER: I don't know what—

PC: What you were using as an example, you'd read—

ER: Oh! Power analysis.

PC: Oh. Power. I'm sorry.

ER: That's how you figure sample size.

PC: I'm losing my Midwestern accent. I can't understand it anymore.

ER: No no, it's me. I have a West Virginia accent. That's sort of the classic example. We used to always say we're going to have a sample size of thirty. That was typical nursing, sample size is thirty. Nobody knew why, it just was standard. And then people realized that you have to have a certain number depending on how much effect you're going to get from your intervention. And the way to figure out that, there is this statistical analysis called power. How many samples do you need to get the power you need to show that your intervention makes a difference? As time went on, the study section became more and more sophisticated, and if you didn't do that, you were never going to get funded. So having been on the study section, you learn those kinds of things. Now let me tell you the downside to being on a study section. The downside to being on a study section is it's a ton of work, a ton of work. So I would take a day off from work and stay home to read grants because you can't read them in between meetings and things like that. You just can't put your heart and soul and your mind into it. So that's one, is the workload. The second thing is if you're on the study section, you cannot submit your own grant to the study section, because they cannot review it because you become friends with the people on the study section, and it puts people sort of in a conflict of interest. So if you're going to go back in for funding, it's not good to be on the study section.

PC: Who appointed you to that?

ER: You have to get nominated and so on, and it really is the director. It is the director of the center.

PC: So Ada Sue Hinshaw would have appointed you?

ER: Well actually who appointed me was Pat Grady, I believe. It couldn't have been though, could it?

PC: No, not in 1990.

ER: I don't know. Maybe it was Ada Sue. It must have been. I don't know. That's a long time ago. I'm an old lady. I don't have any idea.

PC: [Laughs] Why do I not believe you?

ER: Well I am. I mean my God, I retired in 2001.

PC: That doesn't make you old.

ER: Okay, good. I'm glad to hear that. I'll tell my mirror that tomorrow morning. [Laughs]

PC: When you said you went to Pittsburgh then—

ER: I did. I went to Pittsburgh to become dean in 2001, so I was on the study section then. What I was charged with doing when I went to Pittsburgh, it was a very research intensive school in the medical school. The medical school was a powerhouse in research, and nursing had done almost nothing, the School of Nursing. When I was appointed dean, the senior vice chancellor said to me, "I want you to do two things. I want you to get research going, and build bridges to the hospital." They apparently had some falling out between the school and the hospital. Well building bridges to the hospital was no problem at all. I love physicians, I love clinical nursing, and my research has always been in the clinical setting, so that was easy. But getting research going, I had to take faculty who had gone through Ph.D. programs years ago and hadn't done any active research and get them up to speed. So I held research grant workshops for my faculty, and over time, by the time I left in ten years in 2001, we were ranked fifth in NINR funding.

PC: I'm sorry. You went to Pittsburgh in 1991?

ER: Yes, '91. In ten years, Pittsburgh went from no ranking at all to rank fifth in NINR funding, and it was just because you push and pull and scream and yell, and you teach research, and it becomes important. It's so easy not to do research. It's so easy to say clinical teaching is the most important thing. Well of course clinical teaching is. It's our lifeline. But if we don't understand new knowledge, we'll never change the way we

teach, and that's what I think is important. And we've changed. There's a million things we do differently now because of nursing research. That is the beauty. In fact, after I retired, Pat Grady called me and asked me to do a project for NINR. We called it Are We Making a Difference, and I interviewed a group of investigators with their findings and wrote about how we've changed practice based on what they found. It was really fun.

PC: Could you send me a copy of that?

ER: NINR has a copy. You know why I don't have a copy? They have a better copy, they had it on their website forever, and it isn't on there now because it's outdated. But it has the whole write-up. I don't even know where it is. When I retired I thought I wasn't going to do any nursing, but it's interesting. You go back and do things.

PC: All the people I know are busier now than they were before they retired.

ER: It is funny. Actually, you know what's really funny—this shouldn't be on the recording—someone called me last fall to come to be dean at Marquette for one semester, and I did. It was the most fun I've ever had. I did it for one semester, an interim thing while they were looking for a dean, so now I call myself Ellen Rudy Rent-a-Dean.

PC: [Laughs]

ER: I had the most wonderful time in the world, and I did the exact same thing there I did at Pittsburgh. I held research workshops because they were way behind with research.

PC: Does NINR help to establish program goals for grants, or is this really the nursing community which sets its own research agenda?

ER: I think the answer is both. They encourage the nursing community to come in with anything you want to do research on, and if it has scientific merit, it will get a good score at the study section, and then it will eventually probably get funded. But in addition to that, they have really taken a leadership role within the staff of NINR, and the staff puts forward what they call program announcements. What area should we be concentrating on? What area in nursing research are we neglecting or should we go further with? What do you know in the clinical arena that we're not addressing that needs to be addressed? And their program staff do research and bring the program announcements to the advisory council, which is a big national thing with representatives from lots of different places including the lay public and so on. But they bring it to the advisory council, and the advisory council then approves certain program announcements. Let me give you an example that you would understand. When AIDS was first the big deal, what are we going to do about AIDS? It was very clear to everybody that there wasn't going to be a cure for years. There wasn't going to be immunizations for years, and you know, there still isn't. They're still fussing around with it. But there was a huge need for education

for safe sex. There was a huge need for education and care of people that already had AIDS, and that fit nursing's agenda beautifully. So they came out with a program announcement around AIDS so that nurse researchers would think that way and come in with grants. Do you understand what I'm saying? So they kind of pushed us to go certain ways, and they still do that. And I think it is a really good combination. They see the bigger picture than those of us that are out in the trenches, and yet those of us in the trenches who want to do research on say tube feeding of premature infants, they may not see that as a national problem, but if it comes in with a good science, they will fund it. But they may see a bigger issue around premature infants that they want us to take a look at, and they come out with program announcements.

PC: What would you say has been the major impact of NINR on the nursing community?

ER: It's elevated research. In other words, schools who want to be recognized or schools who believe that their reputation is important for recruitment need to be research intensive, and that means they need to get money from NINR. So they have changed the landscape in nursing. It is imperative for schools who have doctoral programs to at least try to get federal funding. Not all of them succeed, and we have way too many doctoral programs in nursing. That's another story that you don't want to get into because it's a morass. But it really has changed the whole landscape in nursing. Nursing research is number one accepted, not by everybody but most people, and it is valued. I think they have really put value on it. The second thing which you should be interested in is we've changed

practice. We have actually changed the way we practice nursing based on what we found, and I think it has impacted patient care. What more could you ask for? We're never going to cure cancer because that's not what we're about. But we might take care of dying patients better than we ever had. We're never going to cure AIDS, but we might teach people how to practice safe sex and stop the spread. There are lots of examples like that.

PC: And this is all because of nursing research that might not have happened otherwise?

ER: Oh yes, I think it is. Where would we have had the money to do some of this stuff? One of the investigators that was heavily funded by NINR is Loretta Jemmott, who is an African-American at University of Pennsylvania, and her fear and her passion is to help young poor inner-city black men and women not to have sexually transmitted diseases, including AIDS. She has had wonderful funding from a variety of sources, one of which is NINR, and she would never have been able to impact the number of people that she has if we hadn't had that kind of money. So she's really, in a lot of ways, if you want to—you could say she saved lives. It's just amazing.

PC: And I'm sorry. This is who?

ER: Loretta Jemmott. If you ever get a chance to talk to her, she's just hilarious, but you can never get ahold of the woman.

PC: Jemmott?

ER: J-E-M-M-O-T-T. She's at the University of Pennsylvania. You can get on their website. But she's impossible to get ahold of to talk to. She's funny, she's hilarious, she's wonderful, and she does tons of stuff with prevention of AIDS. She has models, she teaches the boys how to put on condoms. She said here, let's talk about this. If you're going to have sex and you're already sexually active, I'm not going to change that, but the least you can do is put on a condom. Here's how you do it. She's down and dirty, but she's changing lives, and that's nursing research. No physician's going to come along and worry about that. They're going to worry about the HIV virus and do you kill it and what do you do with it and that kind of stuff. So it's really an interesting division. Nobody bothers nursing in that arena because they don't want to bother us. They don't want to get into that.

PC: Do you have any comments on the NIH differences between bench research and more clinical-oriented research?

ER: We need both. We obviously need both. We're both going to always fight over who should get the most money. I don't really have any comments. I think it's a very difficult tug and pull. We need money for both. And basic research has changed. I mean my God, look at the genome project. The genome project ate up a ton of money, but it

has changed—we don't teach medicine the way we did. We now teach genomic medicine. We don't even teach it the same way for heaven's sakes, and it's going to get even more and more and more that way, so we need basic research. We couldn't do without it. But we also need application, which is clinical research. And to tell you the truth, NINR is blessed because most of ours is clinical, and our physician colleagues have very few places to go to do clinical research. One of the physicians that we have been funding heavily at NINR is a man who does research on end of life, and he has done just a smashing job on end of life research. How do you deal with families when someone is dying and so on, and he would never get funded by his medical colleagues because they're into biomedical research, and he's clinical research, and he's doing a beautiful job. So I don't think there's an either or. I think there's a both.

PC: And NINR has been able to keep both under its wing where other institutes might not have.

ER: Well yes, but it hasn't done much basic research. In fact, I would say if there's anything I've been discouraged about is I don't think NINR funds enough physiological research. But you know, it does what it can and the study section people don't seem to be as high on physiological research as I am.

PC: Can you tell me a little bit about the advisory council?

ER: The advisory council I think is a dictate. At NIH, all institutes have to have an advisory council. I don't think they have a choice. So on this advisory council are several people who have been on study sections, so that there are the scientists on the advisory council, and then there are standing people that represent **armed services** or some such thing as that, and then there are other appointees, like when I think the attorney general gets to appoint somebody to the advisory council, and then there are laypeople on there. So it's fairly big. NINR can give you more details. And then what they do, they don't read grants individually. They simply get the report from the study section with the names of the grants and the score, you know, what score they got in terms of science, and they then approve those grants. For some that are questionable, they might review individual grants, but that's unusual. They will review individual grants that have very high budgets because NINR has one of the lowest budgets in NIH. So we worry about giving \$2 million to one investigator when we don't have that much money, so they review the high budgets. And then they also approve, like I told you before, the program. When the program offices come out with a program announcement about encouraging investigators to go a certain direction with their research, they approve those. So they're an advisory council, advisory only to the director, to Pat Grady.

PC: Do they get caught up more in political things?

ER: No, I don't think they do. I think they really—what do you mean by political?

PC: For example, if NIH wanted to fund something in fetal research, would there be some—

ER: They don't even care about anything but NINR. Now if NINR wanted to fund something in fetal research, they might say something about it, but that isn't our bailiwick.

PC: I understand it.

ER: So they really only advise about nursing.

PC: But I was thinking each institute has its own advisory council.

ER: Yes they do. Each institute has its own advisory, and having been on it and watching Dr. Grady, she pays a lot of attention to them. She doesn't have to do everything they say, but she really does listen to their advice. She tries very hard to get people that are thoughtful and can see the big picture.

PC: You say you have been on them?

ER: Yes, I have been on advisory council.

PC: When were you on that?

ER: Oh now, I don't know. Let me see. I have my little CV here that tells me what I did with my life. Just a minute. Advisory council, oh, 1996-2000. And it's really fun because you don't have all that homework that you do on the study section.

PC: All the glory and none of the work, huh?

ER: Yes. And you're in on things. Like she would always have a speaker, and the speaker was real short, but sometimes she would pick an investigator that she thought was doing particularly cutting-edge research, and they would come and present their prior work and the work they were working on, and kept the advisory council up to date.

PC: And this was something that Pat Grady initiated?

ER: No no no. Well I don't whether she initiated that, but when she became a director, I mean everybody—Ada Sue had an advisory council, too.

PC: I know that, but I mean the speaking.

ER: I don't know. I don't know what Ada Sue did. I only was on the advisory council with Pat, so I don't really know.

PC: Were you active in the AACN?

ER: Oh sure. If you're a dean, you're in the AACN, and I was on their board of directors.

PC: And they have been steadily supporting?

ER: Oh sure, but they're a bunch of deans, and they all fuss about they don't get enough money, so they fuss at Pat constantly. [Laughs] She's wonderful. She's been at NIH for so darn long that she knows how to say something without promising anybody anything. People that are really good at that, that's Pat Grady. But deans always want to know, my faculty is interested in da da da da da, is this a good idea, and she always tells them that's a grand idea. Just work on it, put it together, and come in with a grant. But what they want to know is am I going to get funded. Well, she never can tell them if they're going to get funded.

PC: She doesn't make the decision anyway.

ER: No, of course not, and it gripes me that they even ask those kind of questions. Of course she doesn't make the decision, and they ought to know better than that. But they often get fussed about their school never gets funded, and the have's always get more than the have-not's, you know, that kind of stuff.

PC: What's the relationship recently with the Division of Nursing in HRSA?

ER: I have no notion. I don't have any idea. I don't know if it's good, bad, or indifferent. It's a whole different kettle of fish. For one thing, it only funds educational training grants, and many schools live and die by those, but they're not research grants.

PC: But they're still schools of nursing.

ER: Oh sure. And most of us had some of each. We would have RO1s, R15s, and so on from NIH, and then we would have training grants from the Division of Nursing.

PC: So those were kept sharply separate.

ER: Oh definitely. They're very separate.

PC: And the reputation of a nursing school would be based more on the research than the training grants?

ER: Absolutely, because the training grants are just—they give you funding for salaries, for teaching and so on, and just because you get training grants doesn't always say you're the best school around. For example, you get extra credit for more minorities. You get extra credit for things that don't always, in my opinion, reflect whether that is quality or not. I have my own bias about the Division of Nursing, so I'm probably not the right person to

talk to. I mean I think it's time to stop it. For God's sakes, how long are you going to support all this education? Schools should be able to figure out ways to fund their programs. But some schools will tell you that without training grants, they would not be able to offer certain programs. But what happens is when the training grant goes away, the program closes. Now that's not the way it's supposed to work. You're supposed to promise in blood at the end of these that you will continue them. Well, you can't make a school continue it if it doesn't have any money.

PC: It does sour the next time they ask for it.

ER: Well, I just think it's—yeah. But you're not doing history on that, for pete's sake. I would say don't even touch that.

PC: Okay. And you retired from Pittsburgh then?

ER: Yes, I did.

PC: And then moved to Columbus.

ER: Columbus because our kids all live in Ohio.

PC: Okay. All right. Well, is there something you'd like to talk about that we didn't cover that you think is important in NINR?

ER: One thing. I think that one of the changes I think that you need to speak to at the end of the history of NINR, as you come up to present day, we are much more—we meaning NINR—is much more collaborative now in terms of funding, co-funding things, doing program announcements with other institutes. That has grown exponentially over the last five years. It is very clear to me that NINR, while it's small and while they still know it's nursing and they still say oh those nurses, I'm not sure they know how to do research, we have gained some credibility among our colleagues on the NIH campus because they now are willing to co-fund some of the studies that come into NINR, they're willing to have co-announcements with NINR around certain topics, like end of life. NINR took the lead on end of life, but many, many other people like, oh gosh, what's that one? Health care services research, oh, I forget what it's called—AHRQ. AHRQ, they now are willing to cosponsor programs with us. That to me speaks volumes for the credibility of nursing research, which we didn't have in the beginning.

PC: Okay.

ER: I think the other thing you should ask about that you haven't even brought up is the grants for training, the pre-doc and post-doc training grants. And then they had these things called T32s which are institution pre- and post-doc, so they give grants to

institutions for pre- and post-doc support. I don't know as much about it as I should. I think it's been successful, but I think I'm not a fan of the T32s as much as some other people. I think institutions who get T32s which would—for example, I would get one at Pittsburgh, it would fund two post-docs and three pre-docs. Well sometimes you don't have anybody that wants to take those, and so you go out and you beg and you get people into them that may not be the stellar people. So I'm not as sold as some people are on the T32s. They help an institution because they pay tuition for these kids, but I'm not sure it's helped our science. I don't know if you should put that down. That's a minority opinion.

PC: So it doesn't always strengthen the schools that get them is basically what you're saying.

ER: Right. I don't think in the long run what you're trying to put out is—you're trying to graduate someone who will become an independent investigator. I'm not sure that the statistics show that that's what happens. I think the individual pre-docs and post-docs are a better predictor of who's going to be an independent investigator than the T32s. I know that's all technical junk to you, but it seems to me that when an individual has to apply themselves and get funded, they usually have a really good idea and a strong research project. A T32 is money to the institute. I get to decide who gets admitted, and these kids who get admitted don't even have to write anything about what they're going to do. Do you understand what I'm saying?

PC: Yes.

ER: So I can give you money without even you writing up your project. I think that's a weaker way to do it.

PC: Spend a year with us or two years.

ER: Well yes, spend three years with us or six years with us, but we might do better if we would fund more of the individual ones.

PC: Are these to work in somebody else's lab?

ER: Yes. You have to go in with a sponsor, that's right, and you work with that person, either in their lab or at least with their research or with their data and things like that. It's a good model, and it's a very basic science model. Come work in my lab, I'll let you tinker around with some of my toys, and you can get your Ph.D. while you're my helper. It's a good model. Nursing hasn't used that model as well as it could have. Many researchers don't have a lab or whatever you want to call it. Their research doesn't lend itself to lab settings, so it's a little more difficult sometimes to involve the people.

PC: Okay. That's very helpful. Thank you.

ER: You're welcome.

PC: I will send this off to you. I very much appreciate you talking with me. If I have other questions, all right to come back to you?

ER: Oh sure. Good luck. It's an interesting job.

PC: It is proving more and more so. Thanks very much.

ER: You're welcome. Bye.

PC: Bye.

[End of interview]