

Oral History Interview with Dr. Ruth Lillian Kirschstein, Deputy Director of the National
Institutes of Health. Conducted in Building 1 at the NIH
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Interviewers: Dr. Victoria Harden and Dr. Caroline Hannaway

Please Note: These Interviews Have Not been Verified for Accuracy

Hannaway: In your career, Dr. Kirschstein, you have been the recipient of a number of distinguished awards. We have talked about some of these in earlier interviews. Would you like to comment on your selection by the Office of Personnel Management in 1989 as one of 10 outstanding executives and organizations for its first group of Profiles in Excellence; or on your receipt in 1990 of the Dr. Nathan Davis Award of the AMA [American Medical Association].

Kirschstein: Yes, I will comment. The 1989 thing was very interesting because I think, though I am not absolutely sure, that a number of communications officers at NIH were possibly asked to write things up about various people, and Ann Dieffenbach undertook this for me. She was delighted, and, of course, I was delighted, that I was chosen for this profile, and she then made some changes, as they wished. Then they abandoned the project, and they never printed these [profiles], they never published them at all. I think what probably happened was that the person who had been handling the projects at the Office of Personnel Management left, and somebody else came in and decided not to do them. Now, we have used pieces of the profile for all sorts of things, but it was never published. And it was an interesting experience. The Nathan Davis Award really quite surprised me.

I had no idea people were going to do that in 1990. It was probably [Dr. James] Jim Wyngaarden who did it, and I was quite pleased by that. It turned out that it was quite a distinguished group of people including [Senator Edward] Ted Kennedy and Paul Rogers. The way they do it, the Nathan Davis Award is for civil servants, political and non-political, at the federal, state, and local level, and they have a whole series [of awards]. So Ted Kennedy and Rogers were clearly the political [ones] at the Congress. In the [federal] Departments, since the AMA is a medical association, it is almost always the Health and Human Services Department [that is chosen], but some parts of the Defense Department and maybe a couple of [others]--[such as USDA]--as well. So [Dr. Louis] Lou Sullivan got it at the same time as I did. But the most interesting people were some of the state- and local-level people. There were particularly good representatives in 1990, the year I got it, one of whom was [Dr.] Jocelyn Elders, when she was head of the Health Department of the state of Arkansas. It was not more than two years later that she was nominated to become the Surgeon General and made what happen next [?]. So, we were very impressed with her that night. Then, when the AMA has the next year's submissions, they always ask at least one of the honorees to be a member of the jury. So I have served on the subsequent juries for two, or maybe three, years. After that, you cannot serve anymore. I saw the array of people, and I saw how the AMA handles this. I do not know how I got the award to begin with

because the whole procedure, at least the two or three times I was on the jury, was highly politicized and I was quite distressed by it. Even if they had asked me [to serve] for a third or a fourth time, I would not have served again. And I will not go to the next award ceremonies because I am furious at the AMA about firing [Dr.] George Lundberg [former editor of *JAMA*].

Hannaway: Yes.

Kirschstein: Did you know that he has gotten a new job?

Hannaway: No.

Kirschstein: We can talk about that later. There is an advertisement in *Science* this week for some sort of Web-site teaching and--

Hannaway: Is it an electronic journal of some sort?

Kirschstein: Something like that. I think I have the advertisement from the current issue of *Science*. I will look and see. But that is what made me angry at the AMA. Did you know, we wanted to put George on the Advisory Committee to the Director [of NIH], and the AMA would not let us.

Harden: I believe Dr. [Donald] Lindberg was on the *JAMA* advisory board, and he resigned from it after that incident too.

Kirschstein: So those are the two awards.

Hannaway: Then we had another award question about the Steuben eagle. This relates back to an earlier interview, and you asked us to remind you about this.

Kirschstein: Yes, well, this one was really quite wonderful. The Federation of

American Societies for Experimental Biology--because I am a member of two of the societies, the immunologists and the pathologists--they change the name all the time--American Society for Investigative Pathology now; it used to be the American Society for Experimental Pathology--had been giving very fine awards and to very many wonderful people, many of whom were people who worked for advocacy groups for NIH: Mary Lasker was one, but also some of the others. I was shocked when I got this phone call from the President [of FASEB] in 1993 saying I had gotten the award. It just absolutely overwhelmed me. It was based on the work I had done at NIGMS and all the training programs that were in support of basic research. Then they said that they wanted to change the format, and they wanted to have a fairly substantial ceremony. I do not know if they had had a big ceremony before--I certainly had never been invited to one for Mary Lasker. Mary Lasker is the one, who, when they handed her the eagle, dropped it, and it shattered, and they got her another one. They do not give eagles anymore. They are too expensive. We will come back to that in a few minutes. So they asked me whether they could have the ceremony in the Hubert Humphrey Building downtown. I said, "I do not know if you can have it in the Hubert Humphrey Building. I do not even know whom to ask." So then they called my secretary, who is no longer my secretary, Janice Ramsden, and she called [Thomas] Tom McFee's [?sp.] office--he was in charge of personnel--and they got room 800 down

there [in the Humphrey Building] and filled it all up. They had a little video of all the things they thought I had done. [Representative] John Porter, who was not then chair because we were still under the Democrats, but he was the ranking member of the Appropriations Subcommittee to which I had been testifying for years, came and gave me the award. So it was a very, very special occasion. That was before I came here [to Building 1 to be Deputy Director]; it could have been the spring of 1993, and I came here in July. So that could be. Probably you are right.

Hannaway: That was on your curriculum vitae.

Kirschstein: All right. I always think of 1993 as being the year I moved to Building 1, but it was July 1 when I moved to Building 1, so probably it [the award] was in the spring. Then, during the second year I was here, I learned that I was going to get the Public Service Award for Administration from the American Association of Public Administration, or whatever that is. That [award] was a second Steuben eagle, which I did not realize [until I received it]. So we have two Steuben eagles on our mantelpiece, and it is fascinating because they are different. I do not know why. I mean, I thought the mold was the same, but maybe a particular artist did a few things with it at the end. In one of them, the wings are much finer at the tips; in the other one, they are blunter. But they are fascinating to look at and to compare. We have them on the mantelpiece with three overhead lights, and when you put the lights on, they are quite glorious.

Harden: I am sure.

Kirschstein: It is wonderful. And that is the Steuben eagle story.

Hannaway: You could be on the Antiques Road Show and get one of those experts from Sotheby's to explain why your eagles are different!

Kirschstein: They do not give eagles anymore. They must have decided that if you were going to break them, they are too expensive to replace. Now they give a glass plaque. Senator [Tom] Harkin and Senator [Arlen] Specter got the award this year and got the glass plaque. I felt badly about it, but I never told them what I got.

Harden: You might have moved over here in 1993, but, administratively, in 1990-1991, you were in Building 1 as the acting director of the Office of Research on Women's Health. Would you walk us through the creation of that office? I know a lot of people confuse that office with the Women's Health Study that [Dr.] Bernadine Healy started.

Kirschstein: That is right.

Harden: We would just like to get it all on the record.

Kirschstein: Actually, we have to go back quite a ways.

Harden: Okay.

Kirschstein: In 1983--and I do not remember whether we talked about this before...

Harden: Yes, we did some.

Kirschstein: But just to give us a perspective, I had headed up a task force for [Dr. Edward] Ed Brandt on women's health for the Public Health Service, so I

had been identified [with that area] for a long time and I had continued that. It seemed natural when [Dr. William] Bill Raub was acting director [of the NIH] in the interval between Jim Wyngaarden leaving and Bernadine's appointment, and [there was] a great deal of pressure particularly from [Patricia] Pat Schroeder [Dem.] and Olympia Snowe [Rep.]--both of whom were congresswomen then, Olympia Snowe having gone on to become a senator--and Barbara Mikulski [Dem.], who was, I think, at the time the only woman senator--Margaret Chase Smith had died. Barbara was certainly the first senator who was elected in her own right and not because she succeeded her husband, which is the way Margaret Chase Smith got elected. These women were very deeply concerned about things related to women's health. They were convinced that women were not being included in clinical trials. They would not take no for an answer about that. What we did was to do some analysis. If you analyze the entire portfolio of NIH clinical research grants in 1989 or 1990, you find 13 percent of clinical trials involved women in one way or another, 5 percent involved only men, and the rest, which then becomes 82 percent, involve both. We explained that to these Congressional women at several hearings, and they absolutely did not want to hear it because it spoiled the argument. Now, we have subsequently become very good friends with all of them, but they really did not want to hear it [at the time]. We would explain it to Pat Schroeder and she would go out and

make a public announcement. We would explain it to Barbara, and she would go out and make a public announcement. I guess Olympia did not do quite as much, but Connie Morella [Rep.] did. So it was clear that something was going to have to be done. In the period in which we were trying to work up what we were going to do on women's health here at NIH, including putting women in clinical trials, the Public Health Service task force and committee had recommended that women be included in clinical trials and had put that out as a grant recommendation. I had been busy and had not followed through. Although NIH put out an announcement it was going to do it, it had never done it and had never monitored it at all, which was rather embarrassing. Anyway, as we were trying to decide what to do and what not to do, I had a lot of interaction with the congresswomen. It was an interesting time because usually the Department [HHS] is so determined that you should go through them and not do anything [directly] with Congress as part of the administration. Well, Lou Sullivan was winding down. Nobody who was in any of those offices knew anything, and I just had free rein [to interact] with the Congressional Caucus on Women's Issues. It does not exist anymore. The Democrats had supported it, and, of course, the Republicans, when they came in, just did away with it. As a result, I had worked up very good relationships with the congresswomen. When [Dr. William] Bill Raub finally decided we had to establish an Office of Research on Women's

Health, he wanted to get it going pretty quickly. He came to me as director of NIGMS and said, "Would you mind doing both jobs?" So I established the office. In fact, everybody wanted to call it the Office of Women's Health Research, and I said no, because we had an Office of Women's Health downtown, a continuing effort with the task force, and that was about women's health generally. I was very afraid that at the NIH if the [word] research was easy to drop they were going to drop the last word and it would be [called] the Office of Women's Health, so I insisted it be research on women's health, and that is what it has ended up being. Everybody is calling it ORWH. I brought a group of NIH'ers together who were interested in these activities. I actually got some people on detail to work for me and brought somebody in under an expert slot who had worked for Senator [Jacob] Javits years ago, was interested in sexually transmitted diseases, which was something that was of great interest to Javits, and was in an organization called the American Social Health Association, social health being a euphemism for sexually transmitted diseases. [Dr.] Wendy Wertheimer--she is over in the Office of AIDS Research now--came. She was in Geneva on assignment to [WHO] AIDS there and wanted to come back. I was going to Switzerland, and she came up from Geneva to Basel, where I was. We remembered each other, became fast associates, and I brought her back. She helped me establish the office with a couple of others. We had some hearings. I developed its

first budget. We had a meeting at which we announced it, because the Congressional Women's Caucus decided it was going to come out and have a hearing here at the NIH on women's health research, and they were going to roast us. We set it up because we had to. In his opening statement, Bill Raub said to the Caucus, "We are glad you are here. We have something to announce," and he announced the office and my appointment. That defused the problem for NIH. It did not defuse the problem for the Public Health Service or the Department. [Dr. James] Jim Mason came out. He was the Assistant Secretary for Health at the time. He sat patiently listening to the women in the Caucus lambaste him upside down and downside forwards, and finally after two patient hours, he got up to say he had something else to do and excused himself. Barbara Mikulski, who was sitting next to him and was chairing, said, "You sit down, Dr. Mason. I am not finished with you." He sat down. I actually took Jim Mason, then, to meet with the Caucus. I took Lou Sullivan to meet with the Caucus, and they made peace. There is a wonderful room in the Capitol which was used by the Congressional Women's Caucus for their meetings and also as a sort of a sitting room where they could be alone and put their feet up. It is very hard to find. It is in the Rotunda and off in the corner, and I get lost every time I go there. It is now called the Lindy Boggs room, in honor of her. We went down and dedicated it and Cokie Roberts [the daughter of Lindy Boggs] was there, and that was

lovely. You had to get permission from the women to have a man go in to the room, and the Caucus always had their meetings there. I took Lou Sullivan and Jim Mason down to meet with the women, and they both got off kind of easy because I was with them, to tell you the truth. When Bernadine Healy came, she clearly wanted to make her mark in women's health. I had known Bernadine for years. She had been a fellow in cardiac pathology with [Dr. William] Bill Roberts, and she had actually worked with Al [Rabson] very closely, and we had been pretty good friends. Before she came, when she knew she was coming, she called me up and asked for some advice, and I gave it to her. Her first visit to NIH before she actually took the job, unfortunately, was the three days that I was in court for a polio [related] trial that occurred in 1990 or 1991. It was years and years after I had had anything to do with polio, the government was being sued and I was a witness for three days over in Baltimore. So I could not meet her. Bernadine began to get herself organized, and it was very clear that she wanted to put in her own person in women's health. And we were both at a meeting. I think it was a meeting of the Advisory Committee to the Director. It was her first meeting, I believe, of the Advisory Committee to the Director, which of course she chaired. It also had, besides the members, representative members from the various councils of the various institutes and centers, and the representative that was sent from the Fogarty International Center was [Dr.] Vivian Pinn.

Vivian was eloquent on several subjects as we discussed women's health. It pinged in my head and it clearly pinged in Bernadine's head at the same moment, and at the coffee break we talked to each other and said, "We have got to try to get Vivian," and she succeeded in recruiting Vivian. Vivian, however, was at Howard University and she was not 100 percent sure that she was going to like working for the government forever. So she came to us under an IPA, an Intergovernmental Personnel Agreement. We sat in Bernadine's office, she and I, and Bernadine said, "Gee, I really want to make this an SES [Senior Executive Service] appointment. I am afraid they will take away the SES position from this office if I do not do it. What am I going to do?" I said, "Well, Bernadine, this person has a dual title. It is the Director of the Office of Research on Women's Health and also the Associate Director of NIH for Research on Women's Health. I think Vivian is going to come to the conclusion that she wants to stay. So why don't you appoint Vivian under an IPA to the office. She will do the work and get everything going, and you will see how she does. Then she will decide. Let me retain the title of Associate Director of Research for Women's Health, only until it is settled, and then you can be sure that you have got somebody with an SES filling that job." She said, "Great idea!" The next morning at eight o'clock the phone in the office rang. The secretary came in and said, "Dr. Healy is on the car phone to you." I got on the phone with her, and when I finished the conversation, I walked out

to my secretary and I said, “That is the first time in my life I have ever been fired.” Bernadine said, “I have thought it over and I do not want you.” Boom!

Harden: My goodness!

Kirschstein: I could hypothesize about it, but I won't. The office has been enormously successful, very good. Dr. Varmus has a different style, and his style is not to involve either that office or the other office. That is his style and that is fine. But Vivian came to me and we worked very closely together. I had known her before because she is a pathologist too. She was chair of the Pathology department at Howard. And Bernadine had known her too, which is why she picked it up right away [that she would be a good appointment]. Vivian taught pathology, was chair of pathology at Tufts, but she had also been on the faculty at the Massachusetts General Hospital, and so she was part of the faculty that taught Bernadine in medical school. So she had known Vivian. And she thought about her for the appointment, and I did too simultaneously. It was a good appointment. I do not fault that at all. I think it was very good. And Vivian has a wonderful rapport with the women's community. What we did, however, in the year that I ran the office, set the stage for what Vivian was going to do. I diverged a while ago. I got this group of women from the NIH campus together, and we talked about how we should do something and came to the conclusion, similar to what we had done when we set up the office downtown, that we

really needed to hear from a large number of people. So we organized a three-day conference, which was held at the Hunt Valley Marriott on the other side of Baltimore. We brought in a planning group to run that meeting, which would plan for how we wanted to do this [research]. We decided we did not want to do it by diseases. We wanted to do it by research that was needed on women's health in the various life stages, so from birth to puberty; puberty to young age, which could be 25 or something like that; middle years or early middle years; later middle years; and then old age. We devised sets of work units to facilitate meetings and then invited people. We paid for all the people that we put on our little work units, and people came in droves. It was quite a controversial meeting. A lot of activists came and did not like some things, but in the end it came together in a quite wonderful report that people called the Hunt Valley Report and gave it a formal name. Five years after it came out, Vivian started and she did a Beyond Hunt Valley Report, which took three, almost four, years to come out, so it is now almost 10 years, but it finally got published and it is up on the shelf. And there were a number of changes. We had accomplished a great deal in this time, and a lot of it is due to Vivian. What happened was, I had invited Bernadine, before I knew she was coming [to the NIH], to be the keynote speaker at lunch on the first day [of the Hunt Valley conference], and she accepted. Then, when she became the Director of NIH, she was not sure if she could do it, but

she did. She came out [to Hunt Valley] and gave the keynote address the first day. Then everybody said that we needed something related to women doing research as well as women subjects and studying research issues related to women. So we ran a session on women and research careers and had a second keynote speaker. I invited Shirley Tilghman, who is a professor of biology at Princeton, to do that. I had known her. She said, "Why? I am not interested in that topic." I sent her some data, and she said okay, she would do it. She got so interested and gave such a wonderful talk that she expanded it into two op-ed pieces in the *New York Times* that appeared two days in a row in about 1991-92. They were just wonderful and started a whole train of thought about retraining women, giving them part-time jobs, sharing jobs, and all sorts of things that were needed. That has been one of Vivian's thrusts that has been very good.

Harden: Has it been successful?

Kirschstein: I think so.

Harden: Because I have heard the scientific directors talk about these issues, too.

Kirschstein: Oh, they annoy me terribly.

Harden: But I am talking about the issues in terms of the intramural women trying to build careers.

Kirschstein: Yes, and it is very difficult.

Harden: I would think so.

Kirschstein: For the intramural women here. I owe a great deal to [Dr.] Joan Schwartz.

I have been very active in looking at things, and one of the things that happened after I came to Building 1 as the Deputy [Director], and actually [after] Harold came, was that they had put data together that showed that for the same number of years post advanced degree, whether these people were postdocs, staff scientists, or, as we got into tenure track, tenured people, the disparity in salary between the women and the men was really significant. I know from my own experience that when I was up for a GS-15 at NIH, there was a lot of discussion amongst the then scientific directors about, “Why should we promote her? She’s got a husband who is making a good income.” That was very annoying.

Harden: That question was asked of me, too, at one point.

Kirschstein: Yes. So we took those data, from the women who put it together, which included Joan and another group. [Dr.] Hynda Kleinman was very active in that. She is in the Dental Institute. And we took it down to [Dr. Philip] Phil Lee, who was, of course, at that point, Assistant Secretary for Health, and to the personnel people. They took it to OPM [Office of Personnel and Management] and adjustments were made in the salaries.

Harden: That is very interesting.

Kirschstein: It is similar to what has happened just recently at MIT [Massachusetts Institute of Technology]. Have you read the articles about this group of women at MIT who got together and looked at faculty salaries? They looked at the discrepancy between women and men, particularly in regard

to salaries at MIT, and embarrassed President [Charles] Vest no end. Now the university has to do something about that.

Hannaway: Sometimes you have to be open about these things.

Kirschstein: Well, it was very interesting. I went to--we are diverging, but it is interesting--a session that was held at the [National] Academy [of Sciences] at its spring meeting--it was the first time they had ever had a session like this--on women and minorities in faculty positions around the country. [Mildred] Millie Dresselhaus, who is an emeritus professor of engineering at MIT, spoke about how it never occurred to her to worry about this [issue of salaries], and she did not care, and this, that, and the other thing. I had dealt with Millie for many years, and I am convinced it is because people like Millie would not do anything for years that this question of salaries got worse and worse, and then you finally had to do something.

Harden: I had a conversation with [Dr.] Margaret Pittman about this at one point, and she took the same stance. Tell me more about the relationship between the Office of Research on Women's Health and Bernadine Healy's initiative. Did Vivian Pinn or you oversee what Bernadine was doing in that larger study of women, or were the two things completely separate?

Kirschstein: I did not because, when Vivian came and Bernadine did not want me, I went back to NIGMS. Vivian used to come for advice, and I did give her

advice. Also I went away with her on a day's retreat with her staff to help her organize the office and do a number of things. But, in terms of Bernadine, I rarely discussed any activities. Occasionally I would be invited to a meeting. The first I knew of what Bernadine had in mind was when I was, indeed, invited to a meeting related to something called the Women's Health Initiative. Now, it turns out, based on what I found out subsequently, moderately recently, because, as you know, we moved the Women's Health Initiative out of Building 1, where it was being done, to the Heart Institute about a year ago. That was for all sorts of reasons, which we can come back to in a few minutes. It turns out that in the early 1990s, in 1991, or maybe 1992, there had been considerable discussion within Dr. [Claude] Lenfant's high-level staff about the need to study heart disease in women. They had done the aspirin study in male physicians. There was a great deal of discussion by Pat Schroeder and Olympia Snowe about why they had eliminated women physicians [from the study], and they had done a nurses' study which might have been biased in other different ways. They realized that they had to study women and heart disease rather completely. [Dr. William] Bill Harlan was over there [at the Heart Institute], in charge of either disease prevention or his epidemiology group or clinical trials, whatever, I cannot remember, and a lot of people had been thinking about it and were getting ready to set up something. Claude had presented a plan to his advisory council, of which Bernadine

was a member, and she suddenly realized that this was a great opportunity. Claude did not have the money and she took it [over the study]. It was going to be her legacy, without any question, and she took Bill Harlan with it to set it up. So she did [that], and Bill brought a whole group of people [with him], and they set it up lickety-split, very fast. She got Congress that first year, which was a honeymoon year, to give her a very large budget for it. The budget was projected for 15 years. They had worked up a 15-year projection because this was going to be a long study in which you followed women. It was going to be older women, and Bernadine was very convincing about this. She was marvelous. She could talk about frailty in older women and she really had a beautiful gift [for it], and it was a great idea. I give her full credit for it. And she convinced Congress to give her the money. After she left [the NIH], there began to be questions about how could Congress have made these commitments for this many years as the budget was getting tighter, and was there something wrong with this. There were lots of questions asked, and Harold had to defend it. So an Institute of Medicine study was set up with the full notion that it was going to prove that this [research] was foolish. Instead, it showed that it was really underfunded, not overfunded. Then we brought a group of experts in, Bill Harlan and I, because by that time I was here [in Building 1] and Harold was happy to have me work on this, so that we could report to the Congress. I think it was at Harold's first-year hearing. I cannot

remember exactly. It has been pretty smooth sailing in terms of the study ever since. Now, Bernadine expanded the study. It was not just going to be heart disease. When Claude had it, it was going to be heart disease. There was a similar thing pending, to some extent, in the Cancer Institute. [Dr.] Maureen Henderson--who was, and still is, the very well-known woman epidemiologist at the University of Washington in Seattle and at the Fred Hutchinson Cancer Center--had proposed to the Cancer Institute that it do a study on diet particularly in breast cancer, the idea being that if you lowered the fat content very significantly in the diet of women, you would decrease what was beginning to sound in those days like an epidemic, one in eight, one in nine. She had done a small feasibility study, but when she proposed a larger study, it did not do very well in peer review. She then joined the council. No, maybe she did not. I do not remember. But, anyway, there were great arguments and discussions about it. It turns out that the diet she was proposing was something that would be very difficult to maintain, even with the best intent in the world. It would be very unappetizing [if followed] for a long period of time.

Hannaway: Even if you were dedicated to this idea?

Kirschstein: Even if you were dedicated to lowering your fat content. So Bernadine knew about that too. The idea she got was that we should combine a whole series of things: heart disease, breast cancer, and there was also a great deal of evidence about fat versus fiber in colon cancer, and more and

more evidence about the need for doing something in middle-aged women to prevent osteoporosis so you could get away from the frailty in women who became old. So, Bernadine combined all those parts into the Women's Health Initiative which had three parts and still does. One was a controlled, randomized study in which women were put on certain diets which were more palatable, [given] calcium and vitamin D, and regular mammograms--all sorts of things. I do not know all the details. The other was an observational study where they have done the same thing, but the women were not randomized. The third was a community study where you went out [to the community], and that was a small study. This was a very large endeavor [overall]. Bernadine had an advisory committee but, unfortunately, before she could get the people through for the advisory committee, she knew she was leaving. She went to the first advisory committee meeting and could not work up any enthusiasm anymore, and they felt it. That was probably in May, or maybe June, and on July 1 my phone rang from the chair of that committee: "Ruth, what are we going to do?" So I got them all together again and gave them a big pep talk, and we got going again. The study as a study has gone very well. What it needed, however, was two things. One was it needed, not a group of white men to run it, which is the group that Bill Harlan brought with him because that is who was doing whatever they were doing over in the Heart Institute, and the other thing it needed was time. Bill knew that. It needed

very close supervision, and Bill could not afford the time. He was disease prevention, he was many things. So while the study did go forward, the staff was not of the strength it should be. When I began to dream about how we could improve this, I started talking to people. The major part of the study was still heart disease, but other things were going on, so that you could say that many institutes were involved and not only the Heart Institute. The Heart Institute had lent people, the Cancer Institute had lent people, and because there was osteoporosis, NIAMS [National Institute of Arthritis and Musculoskeletal and Skin Diseases] had lent people. [The National Institute on] Aging--we have frailty in old women--had been asked, but they never could find anybody. So I went to Claude and I said, "Would you like [to take] it?" and he jumped. Then we transferred the study to the Heart Institute administratively under the direction of one of his best administrators, who had a big job. Claude said, "She cannot do both," and I said, "Yes, she can." It was Sue Heard [?sp.], who is absolutely wonderful. We got--Sue did that--all the institutes to collaborate. Aging came in. Sue has a steering committee that consists of all the institutes, and it is just great. Everybody is happy and it is going beautifully. So the study will go on. The thing you have to watch with that study, however, is something that [Dr.] Norman Anderson likes to call adherence. If you are going to follow a group of any sort of patients, women, for 15 years, you cannot afford to have many dropout, or you will

not get statistically significant data. So it was very important to pick the people who ran the centers on the outside, and they have done a wonderful job of that, and their adherence is wonderful. They also did a wonderful job of recruitment. It is a study that recruited something like 160,000 women, and amongst those, it included the largest number of minority women who had ever been recruited for anything, something like 68,000 Hispanics and African Americans. The way they did that was they went to Arizona and Texas and Puerto Rico and they got Hispanic doctors and nurses and social workers to buy into it, and [with their help] they got such people [as participants]. So it has been very successful, and I am very pleased about it. I know Bernadine must be pleased because she had the idea of doing it in the big way she did, and I give her full credit for it.

Hannaway: We have been talking about Dr. Healy, and we had in our question five that she arrived as Director in April of 1991 and not only that she was the first woman to serve as the NIH Director, but she also wanted to develop a strategic plan for NIH, which I recall as being somewhat controversial among scientists. We wondered if you would discuss some other aspects of her directorship and talk about her plan for NIH.

Kirschstein: Let me answer the last question.

Hannaway: All right.

Kirschstein: Do I think that the fact that she was female played a major role in the difficulties that she faced? No, absolutely not! Many people thought she

was terrific, and in many ways she was. She was so convinced of her ideas that she did not always use the finesse, the diplomacy that she should have, to get them across. The strategic plan was one of these ideas. We are doing strategic plans now. The government is requiring that every agency do a strategic plan. It was not the strategic plan per se. It was that the strategic plan became the be-all and the wherewithal. It consumed us in meetings and going around the country, and it consumed trying to get the attention of the extramural scientists at a time when we were not faring so well in the budgetary process. Bernadine was convinced that it would help us fare better. She did not make that case, either herself or anybody else on her staff. As a result, it did become controversial, and she became controversial, and it flawed what could have been a wonderful period. Now, I am very sad about that because, as the first woman director, I would have liked to have seen her directorship be a glorious success. I have not spoken to her since she left NIH other than when she came back for her party. Her chief advisor was someone who had been a planning officer for years in the Heart Institute, [Dr.] Jay Moskowitz, and he was also absolutely convinced that this was the way to go. There were some excellent scientists that she listened to. Whether or not they finally had an influence, I do not know. But a number of things interfered with what could have been some wonderful things she did. She did several wonderful things. Getting Vivian Pinn and doing the Women's Health

Initiative--I will give her all the credit in the world for that. She also did something at a time when funding was very difficult, which could be, and should be, a mark of her legacy, and that was to set up a new grant award type, something called the Shannon Awards. She named them after Dr. Shannon, and she presented the idea at her first [congressional] hearing, because she had been here--I guess she came in September of 1990.

Hannaway: I believe it was April of 1991.

Kirschstein: April of 1991. I guess she testified either quite quickly after that--I would have to look at the dates.

Hannaway: Yes.

Kirschstein: Our award rate for research grant applications was something in the order of 20 percent that year. She had the idea of taking the award rates that were on the margin, the grant applications that were on the margin, and for which the institute directors and their staffs were confident that if you started them going, the researchers would come in with something really good and get it funded, and give those people a small amount of money.

Hannaway: Seed money, in a sense.

Kirschstein: Seed money for two years, and they called that the Shannon Award. They were going to be picked centrally, so people would send the [information on the] candidates in to her and she would have a group who would help her choose. It was a great idea, and it has been very successful. We have done an evaluation of it. [Dr.] Marvin Cassman did an evaluation. It was

absolutely remarkably successful. Harold kept it going for three, maybe four years, maybe even more. This year we are not doing many of these awards because we do not need to, the budget is so good. So that was a great idea of hers. Bernadine was the one who realized that we should go for the Human Genome Project. Wyngaarden came to it reluctantly--I told you that story--but she realized the potential of it. Although [Dr.] Francis Collins arrived just as she was leaving, she was the one who recruited him. I was chair of the search committee with [Dr.] George Vande Woude, and she let us go and play. Francis applied, and she was behind the scenes recruiting. Francis Collins has been a marvelous appointment. Part of it was that she had got the scientific director, who, at that time, was [Dr.] Lance Liotta, to see to it--and that was the first person who ever did this--that Francis had to have an intramural laboratory. So, when Harold came in and all these other institute directors who were being recruited, they got laboratories too. Bernadine realized that Francis had to have an intramural laboratory. We were recruiting for a director of aging, and I was on that search committee. We did it three times and did not come up with a satisfactory candidate, in her view and, frankly, in the view of many other people. She asked to see the list of all the people who applied, and one of them was an intramural scientist, whom, because of snideness perhaps, the search committee had not even been willing to consider because he had never worked in aging. She went down the list and said, "Oh, I know him.

We were in medical school together. Bring him over. I want to talk to him.” He was a commissioned officer, [Dr.] Richard Hodes, and she said she wanted to appoint him. She sent the papers downtown--in those days you had to send the papers downtown--and all hell broke loose. He had never done any aging research, he had never done anything. So Phil Lee met him and thought he was fine. By that time Richard had done a lot of homework, and he had done it by the time he saw her. And we had an administrator in aging, Fernando Something--I cannot remember [his name]; he had come from the University of California, University of Southern California, and he is back there. I can find him somewhere and we can get his name. And Richard convinced him. But the aging research community was having a fit, so she arranged for the stellar members of that community, including [Dr.] Jack Rowe, who was the dean of that group, to join selected members of the search committee, and I was one of them, in this room. Now, Bernadine had turned this room [we are in] into a conference room, so she essentially had two rooms. She had her office, where she had small meetings, and this was her conference room. I guess they took the table out that day. I cannot remember. Maybe not, but this room was just filled with people. I sat on the window ledge, I think. She asked Richard to come over. And for four hours, they grilled him. Richard sat there calmly and answered every one of their questions. When he left and we left, the rest of them stayed, and they all voted not to have

him become the director, except for Jack Rowe, whom she had chosen as the chair. Jack went in and said to Bernadine, "I do not care what they say. You should appoint him." I believe that Richard is one of a few most outstanding directors we have. If you have ever gone to his [congressional] hearings, he sits--and he did this from the first day. Everybody else brings their books and their papers and their this and their that. Richard sits there with nothing in front of him. He has somebody at his side. He does not read an opening statement. He talks without a note in front of him. He answers the most detailed questions. He is remarkable. And his appointment is a credit to Bernadine. But, on the other hand, there were other things that [Bernadine did that] really got people annoyed. She came in one day and told us she was leaving. She got mad at the Department [of HHS], [because] they were going to fire her. That was when [President] Bill Clinton got elected. She had to submit her resignation [at the outset of the new administration], and apparently she was not very diplomatic about it. So Donna Shalala [Secretary of the Department of HHS] told her that the administration would probably replace her. She was trying to be--we had both known Shalala before. Shalala was on Bernadine's advisory committee, and Shalala was president of Hunter, and Bernadine had gone to Hunter High--not that she was there then. I do not remember. But she knew her. So Bernadine came and had the secretaries here pack everything up, and she

was quitting. Then they decided to keep her. She came back and had an institute directors' meeting and said, "Lazarus has risen," and remained just as controversial. Finally she was asked to leave, by March, I think. She actually stayed until...

Hannaway: March of 1993.

Kirschstein: Yes. She had a woman that she had brought in as her public affairs person, Johanna . I remember Johanna's last name, Haus [?] Schneider. Johanna Haus and somebody else, Johanna. [?] The only thing that Johanna was interested in was getting Bernadine publicity. So one day we got a call to come to Stone House on about one hour's notice in March in a snowstorm. I was over in the Westwood Building, and thank goodness [Dr. Jerome] Jerry Green was there, so he drove me. It was to be an institute directors' meeting. We walked in, and we were all relegated to the last two rows, and the press was in the front, for Bernadine to make her farewell address.

Harden: I got the feeling--and I would like to hear your comments on this--that in one sense, there were two factors in the differences between Dr. Healy and the NIH. One was the fact that she came from the private sector, where perhaps decisions can be more easily made in a hurry and so on, whereas at the NIH there is more of a need to negotiate--

Kirschstein: Do you mean academics?

Harden: I was thinking of the Cleveland Clinic, but--

Kirschstein: No, because then-- Actually, Bernadine had been an academician all of her life.

Harden: Yes, that is right.

Hannaway: She was at Hopkins.

Kirschstein: She also had been in government. She was at Harvard, she was at Hopkins. When she came here for two years, it was with a husband, [Dr. Gregory] Greg Bulkley, who went back to Hopkins, and she went back to Hopkins reluctantly. She stayed there and then was asked to join the Reagan Administration in the Office of Science and Technology Policy [OSTP] as the biological, the medical person. She did not know what to do there, and that was true. She was a clinician in clinical research, and she did some nice clinical research [that was] involved with the American Heart Association, [and] was really having a very fine career. At the point that she was asked to go there [to OSTP], she was living in Baltimore with two children, one of whom was probably a year old, and her parents came because she commuted every day by train from Baltimore to here. She asked me to come down and help her at that point on things because I was in NIGMS and that was science. She asked another classmate of hers, who used to help her a great deal, [Dr.] George Khoury. George Khoury was one of the finest scientists we ever had here at NIH. He was in the heyday of his career when Bernadine was in the OSTP, and he would go down and help her with the deep science because it was the time of recombinant

DNA things--not the Fredrickson type, some other controversial things-- and I went down and helped her. At the end of that stint, she got married again to [Dr.] Floyd Loop, who was the premier cardiovascular surgeon at the Cleveland Clinic, and she went back to the Cleveland Clinic and actually recruited some very good researchers there. She obviously had had her taste of politics and so was delighted when she was nominated for this job. I think she actually believed that, politically, this was the way she should behave and did not understand the fact that she could have won everybody over by just holding out her hand.

Harden: This is why I was asking about the difficulties she had. What was it? If it was not that and it was not the sense of being an outsider against the NIH.

Kirschstein: I think it was her own personality.

Harden: I was just curious, because starting with the [Dr. Edward] Ed Rall incident--

Kirschstein: I do not think she knew within her gut how to be a presence in this arena. She knew how to be a presence in the heart arena and on a podium, but not in the arena of everyday relationships with her institute directors.

Harden: It was just curious because there seemed to be so much strong feeling throughout her tenure.

Kirschstein: It was the same thing when she ran for the Congress, the Senate. Was it the Senate?

Harden: Yes. The Congress, I guess.

Kirschstein: I cannot remember whatever it was.

Hannaway: Yes.

Kirschstein: Because she really did not make any friends with that. Now, people who know tell me she has been a superb dean of Ohio State [University], and that she has made some very good appointments there. She has been touting her book. She has written a book on women's health and she is on the television. And I have to tell you that I am so sad about her illness that I do not know what to say.

Harden: Sure.

Kirschstein: Because of the funny relationship we had, I never got in touch with her, but all the secretaries--my secretary worked for her--adored her. They would have fallen on the ground and let her run over them with a 10-foot truck. They all wrote to her, and she apparently was being very upbeat. She is in the middle of either the chemotherapy or the radiation therapy or both. I do not know which. But she is working. People tell me she is back there. So I wish her all the best.

Harden: When she left, you were appointed the acting director.

Kirschstein: That is the problem. That is why she does not talk to me.

Hannaway: Right. That is understandable, I suppose, in a sort of way.

Harden: No, I do not understand that at all.

Kirschstein: I will explain it to you.

Harden: Because she was gone. That is what I am saying.

Kirschstein: She wanted the person who was functioning as her deputy to be acting director.

Harden: Jay Moskowitz?

Kirschstein: Yes. And he wanted it. She worked every which way to get it done. She could not believe that they would deny her that.

Harden: Who made that appointment, the Department of Health and Human Services?

Kirschstein: Sure. The acting director appointment was made by the Department. On the day of her party up at Stone House, which was a hot day, so it must have been June, and I had planned to go, I was summoned to Shalala's office for an interview. And Harold was already on the horizon. Nobody knew that except me. I had known that because I had been among the people that they had called in the search process for Harold because I was one of the people they thought about [for the position]. Now, I cannot hold a candle to him, so we won't say anything about that. And I was delighted when I heard it was going to be Harold. Even before Shalala called me, Harold had been at a meeting that NIGMS was running. On the first day, he said, "I want to talk to you." That was in May, I think, or maybe even early June, a couple of days before Bernadine's whatever. So we went off at lunch and talked. He said, "I am thinking about, if I come and if they finally do it, who should be my deputy?" I said, "Well, I have some great ideas for you." I named Marvin Cassman and I named three or

four other people. After we talked about that for a while, he said, “Stop it. I know who I want. I am trying to get it out.” So he must have told Shalala and Phil Lee. Then Phil Lee called me and so did Shalala. Of course, I had known the secretary before, and it was just like talking to an old friend. We have been very close ever since. In fact, last night she asked me to go share a box at the National Symphony at Wolf Trap, and I had to say no because we were having relatives coming in, but she was very gracious about that. They did not tell Bernadine, nor did they have to. Jay was going around telling everybody he was going to be the acting director and telling people that I was sick.

Harden: Oh, my goodness.

Kirschstein: When I got the position and when she heard, she really got furious. Then, when I got here, I was told by Phil Lee to move Jay out of his job here, if I could, with respect, and I found him a very good job. He had been acting director of the Deafness Institute [National Institute on Deafness and Other Communication Disorders] in its Office of the Director [?] area until [Dr. James] Jim Snow came. I thought Jim Snow needed help about what was going on at NIH, and so they got Jay. But Jay has never forgiven me, nor has Bernadine.

Harden: Is Jay still at the Deafness Institute?

Kirschstein: Jay? No.

Harden: I thought he left. That is why I was not sure.

Kirschstein: He left to go to be some sort of dean at Wake Forest, at Bowman Gray Medical School.

Harden: Okay. I just realized I had lost track.

Kirschstein: He and Bernadine are in contact with each other all the time, and for a while there it looked as though, if the Republicans had won, they would both be back.

Harden: But this is interesting, though, because you knew, when you were acting director, that Harold wanted you to be his deputy, which explains of course, why, as acting director, you did not leave after he came, as many acting directors do, because it was all set up.

Kirschstein: Yes, it was set up. I think when we finally made Harold Director, when we were able to, when the White House made Harold [Director]. In fact, I was in contact with Harold quietly for much of the time. Some of the things I talked to you about. He went off to England for quite a while and we could not reach him there. But I was in contact with him. Anne Thomas and I called Connie [?] to write his press release. We were involved in that. I arranged to bring the people from his laboratory here, all sorts of things. So we knew that. This was in some ways, therefore, one of the smoothest transitions, whereas some of the others were not.

Hannaway: It sounds as though you were doing all of the groundwork here.

Kirschstein: Yes. It has been wonderful.

Harden: I understand, though, that the first day you were acting director, it was not

so smooth.

Kirschstein: It was either the first or the second day.

Harden: I wondered if you would tell us that story.

Kirschstein: It was either the first day or the second day, and July 4 was on a weekend.

Hannaway: You had come on July 1.

Kirschstein: I came on July 1, which was either a Wednesday or a Thursday. Let us see. One, two, three, four. Either way. I got a call from [Dr.] Earl Laurence, who was and still is the deputy director of NIDDK [National Institute of Diabetes and Digestive and Kidney Diseases]. [Dr. Philip] Phil Gorden, the director, was in Italy. They had several sick patients and at least one, maybe two, had died in the Clinical Center on [Dr.] Jay Hoofnagle's service during a study of drugs for hepatitis B. He asked if he and Jay could come over to see me? And they did. I do not know who was his scientific director at the time because he did not come. It was just Earl and Jay, as I remember. It was a dreadful story. It was just so sad. This was a new drug which had been tested in animals, for which they had an approved IND [Investigational New Drug] from the Food and Drug Administration, and which had good animal data, being made by a company, by Eli Lilly. They were not a hundred percent sure that it was the drug [that was causing the problem], but everything about it looked as though it was. The patients were going into real liver failure beyond what was expected. It was fulminant liver disease, but not consonant with the

level of their hepatitis B. The question was what was going on?

In the next few days, we had lost four or five patients, and nine patients had to have transplants. I do not remember the details, so you will have to get those from Jay if you want to put those in there. But we had to have a strategy, it was clear. So they stopped the drug in everybody, they stopped admitting patients, and they had to call all the patients who had been [sent] home. What they found was that one had died somewhere else, and so forth. Jay was working on this with [Dr. Stephen] Steve Straus from NIAID [National Institute of Allergy and Infectious Diseases], who was also interested in this. The two of them were absolutely devastated. I was trying to keep them calm. I called Phil Lee because he had to know, I called the Secretary because she had to know, and I tried to get Harold and was not able to get him over the long weekend. We realized that we had to get some advice, and we began to get advice from all over the place. We had notified the FDA, all sorts of things. Among the things I was most concerned about was not just the patients, but the two doctors, and I spent most of the weekend holding Jay's hand, figuratively. He came over to the house and talked. The most remarkable thing that happened just before the weekend was that I got a call one afternoon at about this time, and it was Secretary Shalala. She said, "I know you are all doing everything you can out there, I know this is something nobody is understanding yet, and I know it is going to take time. Those poor doctors.

Would you give me their phone numbers?" She personally called Jay and Steve to reassure them that she knew it was not their fault, that we were doing everything we could to give them a boost.

Hannaway: That was very kind.

Kirschstein: Wonderful. That is the Secretary; that is the way she is. It turned out, they did everything right. When we brought this very high-level advisory group together, there were no things that could have been done differently, although the AIDS and hepatitis activists yelled and screamed and called for everybody's head. They had discovered a new disease, which is poisoning of the mitochondria by one of these nucleotides, FIAU something--I do not remember the name--which is not totally dissimilar to the drugs for AIDS. There have been no deaths, but there have been toxicities that are not dissimilar from those. A whole new class of disease due to nucleotide analogs was discovered. The NIH got through it and did a report, IOM did a study, and I think we learned a number of lessons about how you perhaps move a little more cautiously in how you do these studies. They were moving very cautiously, but, nevertheless. Luckily, both physicians are still seeing patients, and Jay is back doing hepatitis studies. So we came out all right. But it was rough and it was very sobering.

Harden: Sure. I think we covered the first half of the next question, but on the next page there is a little more, Caroline. Do you want to follow up on this?

Hannaway: We had asked; what were the events that characterized the four months that you were acting director, and what you just described, obviously, was one of them.

Kirschstein: It was one of them. The others were running the place for the four or five months, at least three months maybe, without being able to tell anybody that I knew who the director was going to be, and doing many things that would help him be ready to move in, and yet remain the acting director. And when we finally knew that he was going to need some things, one of the things he-- Oh, and that was one of the challenges. The report from the Congressional Appropriations Committee on the House side was that they wanted a study done, and done immediately, of the NIH intramural program, and we really could not wait to set that up. Although Harold and I talked and we picked some people--I picked some people, he picked most of them--and we got that going. They and Harold wanted to know everything there was to know about the intramural program, and they collected an enormous amount of data. Some of the scientific directors--I shall not name them--sort of said, "Why do we have to give that to you?" Several of them, when they finally found out that it was going to be Harold, and I had asked them to be sent to me, well they sent them directly to Harold. The institute directors were enormously supportive. I had been their colleague for a very long time, and they were very supportive. Scientific directors are their own breed.

Hannaway: Yes. Maybe that is why they are scientific directors and not institute directors.

Kirschstein: Well, I do not know. We have had some who have done both.

Harden: We are moving, then, into the current era, shall we say, under Harold Varmus. Perhaps you will talk some more about your challenges as deputy director while he has been here. Is there anything in particular that strikes you that you would like to talk about?

Kirschstein: Just that I am in awe of how good he is. I am just overwhelmed. Everything that was said in the *New Yorker* article is true.

Harden: I wanted to ask you about that.

Kirschstein: I guess all of us, everybody, and [those] in the article, had no doubt whatsoever that he would be a visionary in terms of what would be the way to move the basic science particularly and the genetics. He caught on to the needs clinically right away. He caught on to what he could really do for the intramural program. I had wondered whether, as a total outsider--I had been here for two years--whether he would simply say, as so many people do, "Why do we need this program here?" but he saw quickly that we needed it and that we needed to improve it and make it stellar. It was not stellar at the time. But more than that, I think his political instincts have been fabulous, and his ability to have caught on to the important aspects of making a budget have been incredible, while at the same time learning the details of the budget. It has never yet not happened that when

the budgeters who are the experts bring him up a spreadsheet, [with] hundreds of numbers on it, and it is the number and the percent and the number and the percent, and he is not one of these people who can subtract in his head, he will point to a number and say, "That cannot be right," because he can in his head get the approximation of its relationship to the other numbers and the percentage being off. Inevitably he will be right. What has happened is that the budgeters--first of all, they never have the papers ready until the last minute, so you are sitting at a meeting when he does that. They work from a spreadsheet that is set on the machine as opposed to years ago when they used to be done by hand, which led to less error, believe it or not. They are going along printing out their numbers, and somebody forgets to change one. Five numbers, 10 numbers before, have all been the same as they were last year, and this one has been changed because you want a 10 percent increase, and they do not change the number to make it a 10 percent increase. It is so easy to do. When they go back and look for it, they find it. But he can spot it in an instant and at the same time get a sense of the overall budget, get a sense of what Congress wants to hear, and get a sense of how to present it to the Secretary. The obstacles are that, until recently, he has not--and he knows it, so I am not saying anything out of turn--been particularly interested in being part of the Department's team. We have all sorts of authorities for NIH that none of the rest of them got. We are getting big budgets when

the rest of them are not. So what I have done is to spend a lot of time in the Department and a lot of time with those people so they think NIH is not [ignoring them]. It is important. It is important for him, it is important for the next director. I do not know when that is going to be, but it has to come sometime.

Harden: This is a question that I would like to follow up on, because Dr. Varmus has started these new initiatives with the E-biomed publishing, and he wants to have an intramural graduate school. I was concerned because the Congress, I mean, the American people, has always opposed the schools funded by the government. We have got USUHS [Uniformed Services University of the Health Sciences] and that is about it. What happens when Varmus leaves? Can his successor pull it off?

Kirschstein: First of all, to Harold's credit, although he has not made up his mind absolutely, he is beginning to pull back from having a graduate school. He is beginning to pull back to the idea that we should have special courses on things we excel in, that we should make forays with the community. So he hasn't quite decided about that. The other thing that is so special about him is he is so smart and so bright and quick that when he hears something that makes him realize that it may not be quite the course he should go on, he will pull back very quickly. The graduate school is a beautiful example of that. I cannot tell you what is in his mind about E-biomed. He has just sent out another memorandum. He has been talking to a lot of people. His

thinking may still be evolving even in that. I do not know. That is one that [I cannot advise on], because I am not [computer oriented]--and he knows it. It is because of him that I do use a computer now. Now, he gave me a machine--I do not know if I said this anywhere--because they told me at some point, I guess a year after I got over here, that as an SES [Senior Executive Service] person, I was the only one who could do the time cards for the SES people in Building 1, so I had to work them out. They brought me this machine so I could do something called ITAS [Integrated Time and Attendance System].

Harden: Yes.

Kirschstein: Of course, I was never in the office when they needed the ITAS stuff done, but somebody knew how to get in and did it. But what I quickly learned was that Harold communicates by e-mail. Now, I told you I never learned to type. And I am not going to take the time to take a typing course now.

Hannaway: But you can press the keys and pick them out.

Kirschstein: I can e-mail and I do. Now, the funniest thing was, we recently did some interviews, and the way Harold does the interviews for appointments that he is going to make is, that after we have decided that, he has me get the deputy directors and some other people together, and I am sort of in charge of the interview of a group with the person, and somebody else does the institute directors. Recently he has begun with the idea that you should send him an e-mail about how the interview came out before he interviews

the person. Before that, we were going in and talking about it. Twice now, the interview has been late in the evening, and he was going to see the person the first thing in the morning. I actually dictated the report to somebody because I could not type it fast enough. And they were long because they were wonderful people and I had to write a lot about them. But I can do pretty well now. I have learned a lot. I have learned how to get into the home pages and all the stuff that I never thought I would learn. But if it had not been for Harold, I probably would not have done it. We still have at least two institute directors who have somebody print out all their e-mail for them.

Harden: I am waiting for Caroline to say, if it had not been for me, she would not have done it either, because I love the computer.

Kirschstein: That is all right. I agree. I tried to take some courses when I was in NIGMS, and I was still typing something with one finger when the instructor was telling them what to do next.

Harden: I had learned to type in high school. No. I took a course at the YWCA, and then I learned to use the computer because I did not have anybody else to assist it. If I wanted to get things done, I had to do it. So, you learn.

Kirschstein: Harold obviously learned to type when he was the editor of the Amherst student newspaper. My husband learned to type, and I told you he typed a document that won him a prize. But I did not type, and I did not learn purposely. I think I told you that. At this point, I do not feel like I have

the time to sit down and learn another [skill?]. So I actually developed a ganglion [cyst] as a result.

Harden: You need voice recognition software where you can talk to the machine and it puts the words on the screen.

Kirschstein: That would be fine.

Harden: They sell it now. You could get some.

Kirschstein: Do they?

Harden: Yes. It will recognize your voice and you can dictate.

Hannaway: You can dictate what you want to write.

Kirschstein: Is that what you do?

Hannaway: That is the way I am going to go if I am given half a chance.

Kirschstein: Okay. Maybe I will talk to somebody about that. I do very well with dictation, actually.

Harden: Yes, we have noticed.

Kirschstein: I used to do the minutes for [Dr.] Leon Jacobs' committee meetings by dictating them all.

Hannaway: Yes, you had mentioned that to us.

Kirschstein: But Harold is so smart that if he thinks that it [the graduate school] really will give NIH a problem. He said today--it was in a closed meeting--one of these principals' [principles'?] meetings; he [generally] prefers not to have them repeated, but this one was not [secret]. He said, "I certainly do not want to set up a graduate school if we have apparent victory and it

hurts NIH.” He will not do anything that will hurt NIH. I have not the least doubt that his period of time [as Director] will go down in history as, if not the greatest, certainly in the same class as that of Jim Shannon was. When you think about it, it has to be greater in a sense, because Shannon was here at a time when Congress was willing to throw money [at the NIH], whereas he [Harold] made them understand it was a good idea, they were there to do it, and there was money. He convinced them from that first year, in the 1994 budget--which of course had been set almost in stone before he got here and was better than any of us thought, but was not good--against all odds, that the caps on the most spending bills that were up between Defense [?], to do this. Harold wooed Republicans who by nature are more fiscally conservative than Democrats. In fact, it is the Democrats who have been nipping at his heels a little bit, not because they do not believe in NIH, but because they know that every time [the budget for] NIH goes up, unless something happens to the rest of those caps--education and welfare, in the broader sense, not just welfare checks--NIH will get cut, and he is concerned about that too. He also is a very good teacher. Somewhere I hope there is recorded his testimony--you certainly have the transcript if not anything else--when he gave a talk at the appropriations hearing on Dolly [the cloned sheep]. Brady McFeeney [?], who writes the *Washington Facts*--he was writing it himself, but he does not write it anymore; Brady and I are great friends--called me over the

weekend at home and said he wanted to read to me what he was going to write about that. He wrote--I can almost quote it because it was so beautiful--"In the hushed room with television cameras blazing, the world's greatest scientist gave the world's greatest science lesson to the Congress." He said something about, "Pencils from reporters were poised but never used because they were so entranced, you could hear a pin drop," and every student in the United States should have been exposed to it. It was just magnificent. He took them through how you make an embryo to frogs and how you did not need [ogenesis?], all the way through. It was spectacular. Part of Harold's great success here is his ability to use the English language. With his training as an English major and as an editor and as someone who got a master's degree in early Elizabethan English or early English, whatever it was, nobody can write for him. He has to write it himself. And he is right.

Hannaway: He can write better than anyone else?

Kirschstein: That is part of the greatness. I have not the least doubt. I think it has been a great experience.

Harden: We need to go back a little here [in our questions], but, as long as we are on these kind of topics, I would like your comments on whether Dr. Varmus is going to be successful in the embryo research question. Do you think Congress will eventually support such research, or is it going to be a pitched battle?

Kirschstein:

I do not think it is going to be a pitched battle, nor was the last time a pitched battle, because what happened when the Dickey-Wicker Amendment was passed was that they put it in at the last minute an appropriations bill. We had had the President declare that we could move to use abortion material right after he got in. Harold came along, and we had the embryo panel and we presented the human embryo research to the Advisory Committee to the Director, and they endorsed it in December of 1993 or 1994--I cannot remember which--and the President stopped some of it. We were getting ready to go again, and then at the last minute they put the amendment on. So I do not think it will be a pitched battle. I do not think we know--I do not think Harold knows--whether the diehards, the group of 19-70, 19 senators and 70 congresspersons, will [prevail] in the end, because with [Jay] Dickey [Rep.] still on our Appropriations Committee, and if you believe that Congress is not going to get around to doing a lot of authorizing legislation--I do not think they will--and the things are going to go up to the wall at the end of the fiscal year or beyond the continuing resolutions to get a budget, it may be that they will stick something else on again right now. Of all the issues that NIH has had to deal with through all the years, the issue that tells you whether you should consider that life begins at the moment of fertilization is the one that crystallizes people more than anything else.

Harden:

And even if it is life, whether that life has legal rights equal to those of a

living person. There are two points to this that I would like to hear your thoughts on. One is that the National Bioethics Commission has gone much further than Harold Varmus has, saying that even if you assume that it is life, choices need to be made because the research is so promising, and you should not deny people with Parkinson's disease or other diseases the results. That is one of the issues I would like to hear you talk about.

Kirschstein:

First of all, Eric Meslin was at the Advisory Committee to the Director [meeting] a week ago today. He is the executive director of the NBEC [National Bioethics Commission]. When asked, he said that what you just said was not totally true. That is their preliminary view of things, and they have not come to the ultimate vote yet. He was very careful to say that he was not at all sure that they necessarily were going to come to the final vote at the position that you just quoted. Secondly, they do not have the need or the history to realize the dangers that we are all in here at NIH and elsewhere, or that some of the people are in. They can say what they want. Congress does not like them. They can dissolve them and they will go home. Or the President does not have to accept their report. Again, like the [issue of the] graduate school, but much more serious, is whether you take a position of principle that may lead to something happening to NIH as a whole. Now, I know there are certain principles that Harold will stand on, integrity, things that he feels are his prerogative that should not be politicized, and so forth. But right from the beginning, he has known, as

has every director of NIH that a decision about this is not a scientific decision. It is a political decision of a scientific matter.

Harden: But what do you think about public support pressuring the political decision, all the people who have relatives who would benefit from this research? Is that likely to have an impact on the Congress? Do you think it has reached that level of public awareness?

Kirschstein: No. I think there is a lot of awareness, but if they, the coalitions and Catholic bishops and others--it is not just purely the Catholics--then go out and say, "We're going to defeat you, Mr. Congressman".

Harden: It is a very knotty issue.

Kirschstein: The Christian right is tearing up, right now; I think at least one of our political parties, as it did once before. I have no prediction on how this is going to come out.

Hannaway: But the research was stopped?

Kirschstein: The research continues.

Hannaway: But who will be funding it may differ.

Kirschstein: Yes.

Harden: And who can control it.

Kirschstein: Well, that is the issue.

Hannaway: Yes.

Kirschstein: The research, whatever amount there is now, will not stop. It will be slowed because it can only be done at levels that are far less than [funding

by] the federal government could provide. If by chance, it takes a lot longer, as things do, to reach the final possibility of showing that you have a product that can do something about Parkinson's or do something about many other diseases, the companies may get discouraged and their stockholders may get discouraged sooner. They may decide to try to capitalize on some small product that they can make that is not of the significance of something that would do something about Parkinson's disease, but might correct something smaller or less controversial or whatever. So that is one thing. Secondly, as Harold has pointed out, and others as well, you cannot be sure that the research is being done with the rigorous oversight and control and integrity--that may not be quite the right word--that you could if it was being done with better federal supervision. You cannot have that kind of oversight.

Harden: And that argument does not cut any mustard at all with Congress? I mean, with the people who are opposed to it?

Kirschstein: They do not want it done at all. If they could pass legislation that would prevent it being done in the private sector, they would, but they know that that would be struck down by the Constitution. They are furious with the interpretation by Harriet Rabb, the general counsel of the Department, that says that, since there was no federal money put into the research from which the current pluripotent stem cells have been derived, now that the cells are here, there is no reason why federal funds cannot be used to

support work using those particular cells. Now, if we are all very lucky, those cells can somehow be around forever, even in a frozen state. Nobody knows that for sure, of course. But they are opposed to that being allowed even, and enough opposed to it that it is possible that they will [try to stop it]--and they have written to the Secretary and to Harriet Rabb, and they are both enemies right now as a result. Now, there are somewhat fewer people, a very minor number of fewer people, who are opposed than there were before. Harold is taking some heart from the fact that the last amendment was called the Dickey-Wicker--Jay Dickey [Rep.] from Arizona and Roger Wicker [Rep.] from Mississippi. Congressman Wicker has a child--or had--with hemophilia or one of the blood disorders and he can see potential for this, and so he has not signed on and that is some comfort, but there are plenty of other congressmen who have. Dickey is, I believe, senior to Wicker on the Appropriations Committee, has more seniority, and I do not think we know what is going to happen. I suspect that if it does not go this year, it still may happen at some point. But this is an issue I would not like to bet on.

Harden: Perhaps we should now move on, if we can go back in time just a little and talk about the issue of misconduct in research, with which you were involved in the late 1980s and the early 1990s.

Kirschstein: And I still am involved.

Hannaway: Very involved.

Harden: There are many different things we could talk about specifically, like the Gallo-Montagnier issue, the David Baltimore case, Walter Stewart and Ned Fader's investigations. I would like you to pick and choose what you would like to talk about and tell us about your involvement with it.

Kirschstein: One of the interesting sorts of anecdotes is that, of course, Ned Fader was one of the original, back in the early 1950s, research associates in the National Institute of Allergy and Infectious Diseases, and I knew him very well. He went off to Harvard and came back, and we have been friends for years. Walter Stewart was this remarkable young scientist who did very innovative things, not having had a doctoral degree, and who worked in Building 4 while I was in Building 4, so I knew both of them very well. They actually would send me things they were doing. They would write me letters: "Ruth, you surely, of all people, must understand us," and "Don't you know what we are doing?" You probably know that the reason they got so deeply embroiled in this is that both of them were Harvard graduates and they were so upset that this wonderful school that they were so proud to call their alma mater, the greatest university in the world, could get involved with the Eugene Braunwald problem in the Heart Institute. I do not even remember the name of the person. Darsee [John].

Harden: [John] Darsee of the [Cardiac Research Laboratory at Harvard], yes.

Kirschstein: And that Gene Braunwald could make excuses, and surely there must be a plethora of this, and they became zealous. I forgot till you mentioned it,

that for the first four or five or six months that I was over here as acting director, they were giving us a fit. I used to be going down regularly to meet with the general counsel and everybody else about what we were going to do with them. The Dean Petit [?] Institute could not make up its mind whether it wanted to send them away or keep them or what. It was just awful. They seem to have quieted down for quite a while now, and I do not know why. I have the feeling that there is something that is going to hit us any moment.

Hannaway: Percolating somewhere.

Kirschstein: Percolating, exactly. Part of it is related to the fact that Walter seems to have changed in some way--I do not know what he is doing, but he has had some family problems and that may have something to do with it. But they are quiet right now. So that was the first thing. The second thing was that we had in NIGMS several cases of what was alleged to be scientific misconduct, one of which was related to a non-physician scientist in a study of burn and trauma physiology in humans, who had a technician who became an avid whistle blower with the man who was publishing false data. And we did what was required. We had the university investigate, and the university faculty committee said there was nothing to it. So the whistle blower wrote us again, and he wrote the university, and we were all feeling our way. This was in the 1980s. We were feeling our way about how to do this. So it was the university's responsibility and ORI

[Office of Research Integrity] might get involved. This was when it was OSI [Office of Scientific Integrity] and it was still here. So they would form a new committee at the same university, and the new committee would say, "The first committee did a terrible job. But we still do not think the person is [guilty of anything]" They would write a new report. This happened four times. Then the whistle blower discovered a new law. It is a law called the Qui Tam provisions, which says that if it can be shown in court that a government agency falsely supported something and there was money owed, that the whistle blower who declared this could gain and could get a third, I think it was, of the money involved. The Qui Tam law was passed either during or right after the Civil War. Apparently--I am not an expert on this--there was a lot of very bad munitions produced during the Civil War which caused a lot of deaths among Union soldiers or it caused them to be slaughtered because the material was not working properly, and it was felt that the companies, or the federal government which inspected them, should pay for the damage. False claims is what Qui Tam means in one way or another. So this particular whistle blower went to the Justice Department and got a ruling that if research misconduct occurred--and there was a large amount of government grant money involved--it should be required that the grant money be paid back to the government, and one third of it should be with interest and one third of it should be paid to him. Now, the last committee

that investigated this individual or OSI--I do not remember which--did finally confirm that in one manuscript, one figure was falsely labeled or identified in one way or another. And we, the Institute, required that the investigator write to the journal to retract. What none of us counted on in those days--I do not know what would happen necessarily now--is that the journal decided not to print his retraction, and simply said it was not important enough. It had happened a long time ago, it was not important enough to do. And we a ruling around here that there was no way we could force them to do it. So that meant we were still involved, although the grant had been terminated. The investigator--it was not considered that he had done something sufficiently wrong to be debarred, which means that for three years you cannot [apply for another grant], and he went for a job at another university. We told the other university the story because we did not want to [conceal anything]. They hired him anyway, on somebody else's grant in another institute. So the whistle blower started again, and finally the Justice Department agreed to take the case. When the case was heard in deposition, I went down and had to give a deposition on it, and the university won the case. I had been deeply interested in all of these cases, and, in fact, when it was the Office of Scientific Integrity, I had been on many of the committees that Katherine Bick, who was the integrity officer, had been involved in. I sat on a number of them and had followed the Gallo-Montagnier case, and that one has got a lot of flavor

which this office has been going over again. They [We?] are particularly interested in the Baltimore case because David was a very close personal friend, as was his wife, and we would believe very firmly that David was a person of great integrity. He made some mistakes; he knows it. Enough said. When Harold got here, there was concern--there had been for a long time--among many of the scientists, particularly the basic scientists, that the definition of scientific misconduct which had been adopted first by the Office of Scientific Integrity, and then it became the Office of Research Integrity, was too complicated. It had four parts to it. It had fabrication of data, falsification of data, plagiarism, and something else called deviant behavior, and nobody knew what was meant by that. The National Academy of Sciences had a committee that looked it over and said, "That part should go, and it should really be this simple FFP," and Harold agreed. By that time, the Department had had a group, or ORI had had a group, called the Ryan Commission, which had made things even more complicated because [Dr. Kenneth] Ken Ryan had a sense of what was moral. So Harold went to the Committee on Fundamental Sciences, which was a subcommittee of the National Science and Technology Council, and said, "Can we get the federal government to find a single simple definition and some principles?" They put together a subcommittee that was chaired by Frances Cordova, who was the chief scientist then of NASA. The Committee on Fundamental Sciences, which is chaired by the director of

NIH, the director of NSF, and the director of the science part of OSTP, said that every group should put a person on it, and Harold asked me to be the NIH representative. I had done a number of things for the NSTC in various subcommittees. And we worked very hard. We were about halfway through--this was by then late 1995, early 1996--when France Córdova announced she was leaving within two months to go become the vice provost of the University of California at Santa Barbara. And they asked me to chair the committee. She had not written a report, so I wrote it, got it around through I do not know how many iterations--by that time it was the beginning of 1997--and finally got it to the Committee on Fundamental Sciences. Then it went through a trek around to get it approved. It took two and a half years to get it approved in the NSTC. It got changed some, but it was okay. I thought and Harold thought that now it was ready, and now we were arguing over how it was going to be brought out and done. But I had a conversation yesterday that is enough to kill you, so we are still at it and I am getting more and more frustrated. I finally said to them, "Forget it. We'll put out our own," and that is part of the problem. At the same time, HHS--and Phil Lee started this--based on the Baltimore case, the Gallo-Montagnier case, and a couple of others, realized that there had to be some changes in ORI, and a group was put together to work on that, and Harold and I were both appointed to that. There is an HHS report which the Secretary has endorsed but we never put

out because we were waiting for the other one, and because the question is, was anybody willing to go down and talk to Mr. [John] Dingell [Dem.] about it. I volunteered to do so. He beat Bernadine up and he beat a couple of other people up, but he and I get along fine. But it has never happened, and so I am working on these two things. I finally told people I want to see this happen before I die.

Harden:

I think we should stop here for today. Thank you, Dr. Kirschstein.