



Oral History of the
Belmont Report and the
National Commission for the Protection of Human Subjects
of Biomedical and Behavioral Research

Interview with
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Belmont Oral History Project

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INTERVIEW

Interviewer: Patricia C. El-Hinnawy, Office for Human Research Protections staff

INTERVIEWER: I'm going to just refer to "the Commission" without putting its full title in.

MS. MISHKIN: Of course.

INTERVIEWER: Could you tell me about why the Commission was formed in the first place?

MS. MISHKIN: The Commission--and I will simply refer to it as the Commission, because its formal title is so dreadfully long. Congress does that without thinking about how they have to talk about it later.

The Commission was formed as a result of a series of hearings that Senator Kennedy had in 1973 and '74, to investigate alleged and really apparent improprieties in research involving human subjects. And it began with the Tuskegee report that had been issued shortly before then, and then his hearings took into account the Willowbrook studies with retarded children and the studies with cancer patients in New York, and a whole series of incidents that seemed wrong to many people.

And his hearings actually funneled into the legislation that created the Commission. It was created really by legislation in Congress.

INTERVIEWER: Do you know why you were asked to be a part of the Commission?

MS. MISHKIN: I became involved in it actually because of what I was doing earlier. I had been invited to help the NICHD, the Child Health Institute at NIH, prepare proposed protections for children as research subjects, and this was--interestingly, this is how things happen in the government. When someone in Congress starts holding hearings about, say, research at the NIH or funded by the NIH, the NIH will hurry to try and put things in place to

show Congress that they have everything under control, and that's really what this was. They wanted to put in place special protections for vulnerable subjects; children, mental patients, prisoners, the human fetus, and so forth.

And so we started with children at NICHD and prepared proposed regulations which in fact became regulations, were published in the Federal Register, and actually were issued as final before the Commission sat and before the Belmont Report was even considered.

INTERVIEWER: What made you want to accept being a member of the Commission staff?

MS. MISHKIN: My work at NICHD was with Dr. Charles Lowe, then the scientific director of NICHD, and he was appointed to be a kind of higher executive director of the Commission, and was therefore in a position to appoint people to be staff members. And since I and one of his other assistants, Duane Alexander, who is now the director of NICHD, we had been involved in developing the proposed regulations on children and the human fetus and so forth, and we just went with Dr. Lowe.

I had gotten very interested in the whole subject matter by that time because I had, after I did the children's regulations, been asked by the other institutes to help them do the proposed regulations on prisoners and mental patients and so forth, because they said they didn't have any Barbara Mishkin to help them, and so could I please do theirs as well.

And so I had that done across the board, starting in proposed recommendations for regulations and so forth. And by then I was hooked. So I went very happily with Dr. Lowe and with Duane Alexander to the Commission staff.

INTERVIEWER: As you look back on your experience with the Commission, is there anything that stands out most in your memory of that time?

MS. MISHKIN: When I think back on the Commission now and compare it with subsequent Commissions on similar bodies all the way up to and including today, what strikes me most is how cohesive a group we were. And that means the Commissioners themselves and the staff together.

We met once a month for four years. I think we took one August off, but we met more than once a month in the beginning when we were doing the very hurried report on research on the human fetus. And from the very beginning, the staff members would hold a dinner for everybody on Fridays at their own homes, and we rotated that, and we just became a very, very close group of people. And although they came from different disciplines and different

points of view, different perspectives on things, we never lost respect or really a deep fondness for each other. It was just wonderful. It was the most wonderful experience I think I've had professionally.

INTERVIEWER: You said you pushed quickly through to the report on research with fetuses. Could you explain why that was?

MS. MISHKIN: We were hurried on the report on research involving human fetuses because the statute which created the Commission gave us a very short time in which to create and issue that report. So we had only a few months in which to do it. It was a real challenge. It really got us off the ground and running fast, and I don't know, perhaps that helped with our cohesiveness, but we didn't have time to be as thoughtful about that, I think, as with the later reports.

INTERVIEWER: Was there any topic you felt that generated more discussion than others among the Commission and the staff?

MS. MISHKIN: The topic that the Commissioners had the most trouble with, interestingly, was the report on research involving children, and it wasn't the recommendations that generated the difficulty. Everyone had agreed on the recommendations. It was what we called the discussion, deliberations and conclusions, and for short we called it D&C, which I think harks back to our original report on research involving the human fetus.

But ever after it was a D&C, when they couldn't agree, and the staff prepared any number of different iterations of deliberations and conclusions to try and capture all the different points of view. And in the end we had, I think, three separate deliberations and conclusions written by different Commissioners, although they pretty much agreed on the recommendations. And it became so frustrating, actually, that the staff rather comically considered writing their own D&C to go along with all the others, because it had been such a long and protracted process. That's the only one that I recall off the top of my head that generated that kind of difficulty in getting a report out.

INTERVIEWER: There were three D&Cs because of differences of opinion within the Commission?

MS. MISHKIN: Each of the D&Cs that were written by different Commissioners, it happened that one or more Commissioners would sign two, for example, of the D&Cs, but they just put a different gloss on what was happening, and they gave different reasons for why they accepted the recommendations. They gave different philosophical underpinnings to the result that had already been reached.

It was funny. We would get to the result and then we would create somehow the philosophical arguments for getting there.

INTERVIEWER: Speaking of philosophical, today some people think of the Commission's work as being only represented by the Belmont Report. Is that how it was seen at the time?

MS. MISHKIN: The most amazing thing for me is the fact that many people now think the Belmont Report was the only report that the Commission issued, and it's just amazing to me because it was not anything special, it seemed to me at the time, although we recognized that it was to reflect the underpinnings of the other reports. But don't forget, some of the other reports were already pretty far along by the time the Belmont meetings occurred, and the Belmont Report wasn't issued until much farther along, maybe in the third year of the four years that the Commission was in process.

And so it really wasn't a big underpinning of anything. They were, to some extent, thinking about it as they went along in the different reports, because after all, it was one of the statutory requirements that the Commission identify the basic ethical principles that underlie the conduct of biomedical and behavioral research with human subjects. And so it was on their mind, it was on their list of things that they were going to have to accomplish, but so far as I can remember, each report had its own special importance to the Commission, and I don't think that any of them, as we were going along, stood out as more important than the others.

As it turned out, the Belmont Report, because it did finally evolve into a discussion that nicely captured the ethical principles that underlay the other reports, even though it was already accomplished, it became a standard, apparently, clearly, that people referred to.

But the problem with that, in my mind, is that many people don't know we did any other reports. I reviewed an article for one of the major medical journals about something or other having to do with research involving human subjects, and it referred to the Belmont Report clearly believing it was the only report the Commission had ever done. And this was a scholarly effort.

I find that disappointing. Very disappointing.

INTERVIEWER: What do you think has contributed to this long life of the Belmont Report as opposed to the other reports?

MS. MISHKIN: I think that what happened is the Federal government, OPRR, NIH initially, made that a point of departure for the assurances that people would submit and then have

approved at the Federal level. And so you had to indicate that you were following a certain set of ethical principles, and they offered the Belmont Report as one of the ones that the institutions could name, along with the Nuremberg Code and Helsinki and any others they wanted to identify, and that's where the Belmont Report began to take on a life of its own.

It's something that people simply recited in their assurances. In fact, you could get a copy of an assurance that was just a fill-in-the-blank proposition from the Office for Protection from Research Risks, OPRR, and it had the Belmont Report in there, and so it just became something that people essentially filled in the blanks, the name of their institution, the name of their institutional official, and so forth and so on, and signed and sent in.

And so then, because it was required that that be distributed to investigators--although I don't think that really happened as often as it should have--investigators started learning about the Belmont Report. IRBs [Institutional Review Boards] started learning about the Belmont Report, and everybody started talking about beneficence and justice and respect for persons simply as a mantra. I didn't think they fully understood what these things meant or were intended to mean. They simply said the words, and it became, you know, do you know what protection of human subjects is? Well, yes, it's respect for persons and beneficence and justice, and I don't think people probed much beyond that. They may still not.

INTERVIEWER: Do you think that people today use that as a sort of mantra?

MS. MISHKIN: I think today it's still being used as a mantra. I think some very well-educated IRB administrators and some well-educated IRB staff have some inkling at least of what it means, and surely people who study and teach in the area of biomedical ethics I would hope would know.

But I think there are still a lot that are simply reciting the three principles without much understanding of what is intended.

INTERVIEWER: Could you talk a little more about what the political climate was like when the Commission started its work?

MS. MISHKIN: When the Commission started its work, it was very interesting. There was a great deal of conflict and tension on Capitol Hill and throughout the country about research involving the human fetus, and that was the real focus of political conflict in those days.

We had just had Roe v. Wade from the Supreme Court, and a lot of people feared or at least said that they feared that women would become pregnant and have abortions simply to provide fetuses for biomedical research, and this was being said rather frequently and loudly

by certain groups in the country. And so when the Commission was being appointed, there were great concerns about there being an appropriate number of people who would honor the place of the fetus in the human condition, and so when they appointed Ken Ryan to be the chair, I believe that they were quite pleased with the fact that he seemed to be Catholic and that he would perhaps--as an obstetrician and gynecologist--that he would put a certain amount of weight, at least, in the balance of things, toward the fetus.

And then they appointed Al Jonsen, and that's just a lovely story which I think he recited briefly in Wisconsin at the 25th reunion. He was a Catholic priest at that time, and I know that a number of people felt that the Commission ought to include a Catholic priest, and so they appointed Al Jonsen to hold up that end of the argument.

They did not know, the people who appointed him, nor did we initially know, that he had already sent his papers in to Rome to be relieved of his priestly duties, because in fact he intended to marry a woman that he had met at Georgetown.

This became known maybe about two years into the Commission's life, and so that the point of all that is that in appointing Commission members, just as in appointing Supreme Court justices, you never really know what you're getting. And if you appoint someone to hold up a political point of view, you can never depend on that being the case, as things roll out.

So that's how we got Al Jonsen. He was a wonderful member of the Commission. He was able to consolidate different views and to help people to reach a concordance of their own very diverse views on certain things, and he was a real peacemaker as well as a very thoughtful member of the Commission.

INTERVIEWER: The Commission certainly seems to have had its share of strong personalities, and I'm sure the staff did, too. Were there any particular points along those lines that stand out in your memory?

MS. MISHKIN: The Commission members all had strong personalities, but they were in different areas, for the most part, and from different perspectives, and I don't think that in any particular conversation or deliberations that there was a clash of personalities over a topic that reflected strongly held personal views in a way that was meant to be antagonistic.

They never ceased to be respectful of each other, and respectful of each other's views, and the staff the same. We were all from different disciplines. I think we had law, we had philosophy, we had pediatrics, we had mental health, we had sociology in Brad Gray, and so we all came from different points of view, and I had some very interesting conversations during which Brad Gray tutored me in certain aspects of sociology and helped me to

understand areas that I perhaps thought I understood but did not understand fully. And that was fun.

But whenever we did that, it was educational. It was never confrontational. I may simply have forgotten it, I don't think, but I do not personally remember any personality conflicts.

Pat King and Dorothy Height frequently had to remind the other Commissioners, for example, when you're talking about children, that not all children lived in a unit that we think of as a family unit. They don't all live with a mother and father. They may not even live with a parent. They may live with a grandparent or an aunt who may not have any legal authority, clear legal authority to make decisions on their behalf. And they would remind us of this, but gently.

INTERVIEWER: In mentioning those two women, you were among the few women who served on the Commission staff and among the Commissioners as well. What was that experience like?

MS. MISHKIN: You know, occasionally I'm asked what it's like to have been the only woman or one of few women on the staff of the Commission, and you know, that surprises me. It never occurred to me. Simply never occurred to me. And I don't think it occurred to anybody else to make distinctions with respect to gender. I didn't see it amongst the Commissioners or among the staff or in the interactions between Commissioners and staff.

I suppose the only part that I might have thought that played a role was not just in this Commission, but as I went from the National Commission to the HEW [U.S. Department of Health, Education and Welfare] Ethics Advisory Board and then ultimately to the President's Commission [the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research], I was always appointed deputy or assistant director to a male director.

One might pause to consider that, I suppose.

INTERVIEWER: You were also one of the very few, if not the only person, who listed bioethics as your area of specialty.

MS. MISHKIN: I guess I am listed with a specialty in bioethics on some of the Commission reports in the staff areas. Which is strange, because actually bioethics wasn't even a term of art when we started. It crept into the public discussion and discourse and dictionaries I think probably partly through the Commission, but I never had training in bioethics. I don't think anyone on the Commission had training in bioethics. There wasn't any such thing back then.

And most people whose names are associated with bioethics, as I guess mine is now, were self-appointed by ethicists or became viewed as bioethicists because of their work on the National Commission.

I had, of course, majored in philosophy in my undergraduate years, and had taken a mixed degree at Yale which included philosophy and behavioral sciences. But interestingly enough, I never had a course in ethics. And I feel that to a certain extent it's a sham to call me a bioethicist. Well, right now I feel like a lawyer. I have become more lawyer than anything else. But even back then, I would have been pleased to be called a bioethicist, but I had no training in it.

INTERVIEWER: Were there any ideas or issues that you felt the Commission could have included but did not?

MS. MISHKIN: One of my biggest disappointments, I think really the only one, about the work of the Commission was not anything that the Commission itself omitted, but rather what the Department of Health and Human Services, or actually then it was HEW, Health, Education and Welfare, what HEW and all the later members of that department failed to do, was to implement our report on those institutionalized as mentally infirm.

Now that's a horrid title for a report, but that was Congress' idea, not the Commission's idea. We all thought it was dreadful, but we felt we had to respond to what we had been asked to do.

That report had recommendations, and I think very thoughtful recommendations, in it that would have made the job of IRBs today a lot easier when they try to consider how to review and approve research involving people with cognitive impairments, particularly in research involving Alzheimer's disease and similar degenerative cognitive disorders.

We need research in that field so badly, and there's nothing in the regulations now that gives any guidance whatsoever to the IRB and how to handle that kind of research, when the subjects may not be able to provide informed consent on their own.

INTERVIEWER: At the time of the Commission and the Belmont Report, the prevailing view was that vulnerable individuals such as women and children and prisoners should be protected from research. But now there is more encouragement in the environment to conduct research with these vulnerable populations and allow them access to research studies. What are your thoughts about that?

MS. MISHKIN: A funny thing has happened since the time of the Commission. People

viewed women and children and prisoners and people with mental disabilities as vulnerable populations who should be protected from research.

The Commission felt very strongly that research needed to be done in order to protect these people, to protect their health, to provide answers to lots of difficult disorders and diseases that affected these people.

But the most interesting thing had to do with the prisoners. It had been conventional wisdom that prisoners wanted to be in research and were induced to be in research because they got much better pay in the research in the clinical trials than they did in their regular prison jobs. We made a trip out to Jackson State Prison in Michigan and we spent a day there and we walked all around and we talked to people, prisoners who had been in research, prisoners who didn't want to be in research. We talked to guards, we talked to the prison boss, and it was very, very enlightening.

What we learned there was they weren't doing it for the money. In fact, they lost their place in the hierarchy of jobs and pay if they left their prison job to go into research. But the very, very strong inducement for them to go into research was it was about the only way that they had contact with medical people, and that they could get a good medical exam. Health care in prisons was appallingly bad, and these people, even if they went to sick call, even if they had some really difficult problem, had great impediments to getting any access to medical care, and this was their way of doing it.

And so you will see in our report on research involving prisoners, although Ken Ryan kept reminding us that we weren't the Commission on prison reform, nevertheless, in our report involving prisoners, you will see a list of conditions that we said had to be in place before a prison could be involved in research for its prisoners, and one of the first conditions is that there must be good access to medical care other than through the research itself.

And so that was one huge piece of conventional wisdom that was overturned, although I'm not sure how many people know about that.

With respect to women and children, I think a reverse kind of thing has happened. Back in those days the general view was that they had to be protected; children, because they were, of course, vulnerable and their parents might, for reasons other than their children's health, want to push their children into research; and women, because there was a great concern, especially for clinical trials, that they had to be protected from possible pregnancies that they would not be aware of at the time that the research would be going on. And so a lot of protections were put into place.

What happened was that women particularly started expressing a view that their rights were

being ignored in a number of areas, and one of them had to do with research involving women's health, particularly, and so as that became articulated more and more, and it became evident that research involving women's health had to be a priority at NIH, among other places, a lot of the restrictions on permitting women into clinical trials and so forth had to go by the wayside because up until then we knew only about how drugs worked in the male population. We didn't know how they worked in women, and they might well have worked very differently because of the different hormones and everything else, and women's physiology.

Finally we got to learn about how women metabolized those same drugs and it did turn out to be, in some cases at least, quite different.

With children, some of the Commissioners even, and also Bob Levine, had talked about children being therapeutic orphans in that we had no idea how the drugs approved on the basis of research involving adult males would work in children. And again, because of different metabolism, among other things, you couldn't just cut the dose appropriately according to weight. That would be dangerous because children did metabolize these things differently, and so I think it was the recognition that we really didn't know much about how these drugs worked in women and children, and they had a right to have the research done before these drugs were given to them.

That, I think, swung things over for women and children. Now we hear people complain, particularly in the cancer and the HIV field, they don't have access to clinical trials.

Let me add one thing with respect to the prisoners. This is just an interesting side anecdote. One of the concerns we had was that we had to make sure, we wanted to make sure that when prisoners became involved in research, it was the same kind of research that nonprisoners out in the community would be willing to become involved in, and so this became a general principle, that you had to have community members, people out in the free community, willing to be part of this same research clinical trial.

While we were writing that report, they began testing swine flu vaccine, and they were testing it on prisoners, and a circular came around through NIH, and we were housed in NIH at that time, asking for people to volunteer to be--I think these were phase two trials of prisoner research--to volunteer because they needed community members to volunteer.

Well, since I had been writing the report on prisoners and putting this in, I figured, well, I'd better put my money where my pen was, as it were, and so I volunteered. And I went over and I had flu vaccine, and I became terribly ill. It was just awful for several days. And so my children, who at that time were from about age six to preteen, developed their own general

principle, which was that mothers should not be permitted to be in research without the consent of their children, because I couldn't help them with anything.

Anyway, that's just a little side anecdote. But that's how these things developed.

INTERVIEWER: There seems to have been a shift over time in the focus away from protecting subjects from risk and toward giving them access to innovations that might help them. Do you think this shift is consistent with the principles of the Belmont Commission and the Belmont Report?

MS. MISHKIN: I think that the shift to permit women and children and some of the people who had been overprotected, perhaps, in the days of the Belmont Report is healthy.

What I find disturbing these days is a misunderstanding about the nature of biomedical research and the tension between the eagerness of people, especially when they have fatal diseases for which no other treatment has been helpful, a tension between their eagerness to get into research on the one hand, and this new, very recent development, which I find very disheartening, to sue research institutions when a research protocol turns out not to have the positive results that one hopes for.

One cannot always have positive results in research. That's the nature of research. We do it because we don't know what the results will be, and the best we can do is try to make sure that the prospective subjects understand that...that they understand the risks, that they understand the extent to which there are unknowns in any research that is conducted these days.

And if you do that, that's the best you can do. And if some fatally ill people nevertheless become captives of their disease and we cannot rescue them and they die, that's very sorrowful, but that is not the fault of the research. That's the fault of the disease, and I find the litigation now very disruptive, off the mark, and very disheartening. I hope that it does not result in a lessening of the willingness of people to participate in research because that would be a real disaster, I think, for medicine and for all the people who get these diseases.

INTERVIEWER: Do you think there is a need today for a new edition of the Belmont Report, or would there be ideas or issues from the time of the Commission that need updating?

MS. MISHKIN: I think that there may be details in the various individual reports that may need updating today in light of things that we now know and perceptions that may have shifted. But I would not like to see the Belmont Report changed. It's a historical document. It stands for what it says. And it says what it stands for.

And I think we should let it alone. I would not like to see it tampered with. I don't think the Nuremberg Code should be tampered with. That's a historical document, too, and the Belmont Report, I think, says fully and articulately what the Commission thought. And I don't think it is the purview of any later Commissions or anybody else to change their expression of what they thought.

INTERVIEWER: Do you think the regulations appropriately reflect or embody the ethical principles that were embodied in the Belmont Report?

MS. MISHKIN: Regulations, on the other hand, are always an evolving body of work, and they may change from time to time. They have changed with respect to women and children. And as I have indicated, I fervently hope that some day we will have some regulations that provide guidance with respect to cognitively impaired individuals for whom research is so desperately needed.

My mother had Alzheimer's Disease. It is a terrible thing to watch. She was a physiologist, which was rare in her generation, Ph.D level. The one thing she feared was Alzheimer's, because she had an aunt who had become totally wheelchair-bound from Alzheimer's, and rescued several times from pneumonia only to sit further in her wheelchair, uncomprehending. It is just dreadful, and we definitely need research there.

And anything that we can do now to get rid of impediments on research involving those whose cognitive capacity is in decline, we must do. We must do that. And as soon as possible.

INTERVIEWER: Is there something you think that OHRP could take a role in in forwarding this issue?

MS. MISHKIN: I don't see why OHRP has not prepared proposed regulations and sent them through the departmental approval process. That's part of their role. They have the authority, I believe, even as it's been rewritten, I believe OHRP has the authority to propose, and it's such a large vacuum and it's such an obvious vacuum, and it gives IRB such a problem not to have that kind of guidance, that it has puzzled me that OHRP has not proposed regulations in this area. I hope they would soon.

INTERVIEWER: When the Commission discussed the Belmont's three ethical principles, was there any more weight given to one or more of them than to others?

MS. MISHKIN: IRBs often get tangled up amongst the three ethical principles because they sometimes come into conflict and IRBs often ask and scholars often ask which of the three--justice, beneficence, and respect for persons--took precedence in the view of the

Commission.

The Commission concluded that none of the three should take precedence in any hard, standard way; that you would have to look at the individual situation, and determine with respect to whatever the question of the time was, if you had two of the principles in conflict, you would have to determine based on the facts and what was at issue, really, which of the two would have to give way to the other.

I know in philosophy, one frequently says that a certain principle trumps the others. The Commission expressly declined to do that with respect to these three ethical principles.

INTERVIEWER: Is there any other topic that you would like to include in this conversation?

MS. MISHKIN: Maybe it would be interesting for me to set the stage a little bit and describe what Belmont is, why the report is named Belmont, and what it was like being there.

I'm a fourth generation Washingtonian, and I had never heard of Belmont before, but Belmont in fact is an old mansion in I think Prince George's County, perhaps. I had never been there before.

We went during February, in 1976, and there were patches of snow on the ground, the sky was gray, the trees were bare. It was very dreary looking as we approached it. It was nicer on the inside. Lots of different rooms. The rooms upstairs where the staff would have stayed were very, very small because they were politely spoken of as the servants' rooms, but I think they were probably slave rooms. They were very tiny.

So the staff would really implore us not to stay there, but rather to commute, and so we did.

Belmont was a very old building, as I have said, and so there were narrow hallways and there were stairs everywhere. Unfortunately, one of the members, one of the people who had been invited as a special consultant to our retreat, was wheelchair bound, and so it became the role of one of our graduate fellows to lift him up and down these stairs and to take care of other personal needs that he had, because this is way before we had any requirement of access to buildings.

I think the building was government-owned back then, although I'm not sure, because I assume that's why we were there. It probably didn't cost a lot.

We didn't want to go any place really spiffy, because that would seem out of place, and so we ended up at Belmont. It was kind of dark inside. We brightened things up. That was the first

time I met Charles Freed (phonetic), who was again one of our expert people. I don't think he would mind my saying this. He had recently hurt his back, and so he spent the entire meeting on the floor, flat on his back, and my most vivid memory of him is lying on the floor and articulating to the ceiling all of the marvelous things that he was trying to tell us.

And I celebrated my 40th birthday at Belmont, as it turned out, and so, you know, we coalesced and we became a cohesive group over the, I guess it was four days that we were there. All of the papers that are in the appendix volumes to the Belmont Report were prepared by philosophers and other faculty members, usually, for the Commission to help them think about the ethical principles, and they were the people who were invited to come and meet with the Commission over those days at Belmont. It was a very interesting experience, and I think this small little report that came out of it that has lived so well throughout the intervening years is a very good reflection of what came to pass during those days.

People wondered sometimes, looking back on Tuskegee and Willowbrook and so forth whether any research of that kind might take place now in the face of Belmont. I certainly hope not, for starters. I don't think so, but Belmont is really only the ethical underpinning for all of the regulations, and the regulations are the underpinning for everything that the IRBs do. And so ultimately it's up to the IRBs to stand guard, and to make sure that nothing like that ever happens again.

Even the Department of Defense, even the CIA was required to have an IRB and required to have an outside member on that IRB, and actually shortly after that happened, I was invited to be the outside member on the CIA's IRB. A very interesting experience which I won't go into now, and actually for the most part can't go into. But I am permitted to say that I did that.

So even those entities have an IRB and it's supposed to have an outside member on it, and that is supposed to protect, more than anything else, against this kind of thing happening again.

One thing that one could say about the outside membership on the IRB, back in the 1970s, we were thinking of IRBs with about five members, something rather small. And so to require one outside member on a five-member IRB was to require 20 percent of the membership to be outside, meaning unaffiliated with the institution.

Now we have IRBs with 35, 36, 37 members on them. I've seen such numbers. I've done a lot of IRB audits and I've seen immense IRBs. For an IRB of that size to have only one outside member is almost useless unless you have a very unique and outspoken person.

The outside members with whom I speak on IRBs are not wallflowers. They speak up; they do

not feel imposed upon by any of the other scientific or medical members of the IRB. So we don't have to worry that they are somehow being intimidated by the others. But, nevertheless, they may be outvoted, and perhaps one ought to consider changing the IRB membership requirements to say that it should be a certain percent of the members of the IRB, rather than one member, which I think in a large IRB is really not sufficient.

INTERVIEWER: I have heard that in certain organizations like Western IRB, up to 50 percent of the IRB members can meet the definition of outside members. How do you think that affects the deliberations of the IRB?

MS. MISHKIN: I have never reviewed one of the so-called independent IRBs. I understand that their composition is quite different from those that we have historically seen in universities and other research institutions. So I don't know how that works.

In a way, virtually everybody on the IRB could be viewed as outside because they're not involved in the research that's going on, and that's why you want an outside person. They're not affiliated with the institution that's doing the research. And so if the entire IRB is unaffiliated, then it as a whole could be viewed as outside membership.

On the other hand, you need to have members on any IRB, whether it's an unaffiliated one or an institutional one, that have the background to deal with the scientific material that's being put forth in the proposals and the protocols that they're reviewing, and so you need to have a good number of scientists or at least be able to bring them in as consultants, because you're going to have an awful lot of different kinds of protocols put forward.

Although I do understand that a lot of institutions that have their own IRBs send their sponsored research, their research that's sponsored by drug manufacturers and device manufacturers, will send that to an outside IRB because they seem to process them more quickly than the internal one.

I don't think much about how they operate, although I do know that one or two of them have already been accredited. So they must have good operating policies.

And, by the way, I do think accreditation is a very good way to go. I thought that for a long time, and it's been proposed for a long time, actually, and I'm very glad to see that now coming into being. And I would hope that the Federal agencies, OHRP and FDA, would accept accreditation as demonstration of the adequacy of an IRB. But it's just getting underway.

I can't think of anything else. I will after you leave.

-END OF INTERVIEW-