

INTERVIEWEE: FREDERICK REINES
 Founding Dean of Physical Sciences

INTERVIEWER: Samuel C. McCulloch
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SM: This is an interview with Professor Frederick Reines, Founding Dean of Physical Sciences, on May 31, 1990 in Humanities Office Building 360. Now, the first question, Fred, is what attracted you to come to UCI?

FR: Well, as with all these things, it's always a complicated story and a series of happenstances. However, as I try to recall the state of mind, et cetera, I had always had the University of California as a kind of ideal place and this was heightened by the role of the University of California in connection with the Los Alamos and Livermore, and I had been at Los Alamos for fifteen years. So I had the highest regard for the university as an excellent institution of learning and research. That was just one, the background feeling.

 The other point was that where I had been previously, that is, Case Western Reserve University as it's now called, it had a sort of static feeling about it and I wanted to go to a new venture, someplace that was growing, ever growing, ever changing, something brand new. And it just turned out that there were several campuses being built in the University of California, and on one of them, UC Irvine, there was a fellow named Ken Ford, who had been at Los Alamos for quite

a length of time. And he told me about this burgeoning new place, new campus, and suggested that perhaps I might be interested in joining it. Well, that was nigh impossible because of the fact that I was a department chair, and a department chair and the dean, you know, are sort of at each other's resources, so to speak, and I just didn't feel that I wanted to be a dean and worry about the chair and all that sort of thing. But nevertheless, I was persuaded to come and visit and I visited. And Dan Aldrich across the way, in that now still temporary, permanent building which housed the beginning of the university, Dan Aldrich interviewed me. I was enormously impressed by this man.

SM: Good, yes.

FR: His cheer, his optimism, his enthusiasm, and I thought, "I've got to go there, if they'll have me."

SM: (chuckling) Wonderful. Well, what I was able to do, I found out the chairmen didn't remain chairs for long and deans didn't remain deans for long. And they all had the same, everything the same as other campuses--same salaries, same pensions, same, you know, same sabbaticals, same research grants, you know.

FR: Yes.

SM: And that made a lot of difference. When I just arrived here, Fred, there wasn't a tree on this entire campus, not a tree.

FR: I don't think there were any trees when I first came in 1965 to Irvine.

SM: Lots of cattle, though.

FR: Right.

SM: Well, we're glad you came, Fred, and I remember you joining our faculty.

FR: But there's another thing that comes to mind, and that is . . . Oh, shucks. Now, let me just try to think. Oh, yes, back at Case, I had a full-blown research activity, everything was going fine, and I asked . . . but I felt I wanted to come anyway. And I asked, I think it was John Wheeler. I described the situation. I said, "John, what do you think?" He said, "You've got a good research program going and all the rest of it. Why do you do this?" Well . . .

SM: What's his position?

FR: John Wheeler? Oh, he's a distinguished, if not the most distinguished, certainly very high up there as a theoretical physicist. He was at Princeton at that time and I really valued his opinion. But after having said no to his advice--twice this happened, (different contexts)--I thought that I was glad that he still talked to me. (laughter)

SM: Well, you have Dick Feynman out here at Cal Tech.

FR: Well, yes. In fact, I was in his group at Los Alamos, as a matter of fact.

SM: I've read his autobiography.

FR: Yes, yes.

SM: I knew him personally on the Curriculum Commission.

FR: Yes, you described that.

SM: A brilliant man.

FR: Right. He really read the material and knew what he was talking about.

SM: He was brilliant.

FR: In any event . . .

SM: So, anyhow, here you are. Now, as you fitted into your job and so forth, what are your main achievements, do you think?

FR: You know, I've been thinking hard about that and I have difficulty. I can't think of my achievements so much, as I can think of the places where I just didn't do it right or else failed. That's not being modest. It's just plain true.

SM: (laughter)

FR: But, actually, I think that one's failures rankle and deepen as time goes on. And one's successes, well, if you had accomplished that which you thought you set out to accomplish, you've set out to do too little. So I have a . . .

SM: Well, your achievements. You've put together some very fine faculty. Of course, when Ken [Ford] left us, you carried on, and then you have Physics. This was your own department. And then Chemistry was going great guns with Sherry pushing things, I suppose.

FR: Yes, yes.

SM: (inaudible) another . . .

FR: But the Mathematics Department has labored. There was one juncture which was a terrible experience. The Mathematics Department was in such disarray that I had to effectively depose the Mathematics chair and become chair for two weeks while we tried to straighten this up. There was bickering, problems with the Math Department, and the quality was not that which one would hope for; and I gather that subsequent deans find it still a very difficult situation. And it is improving now. After all these years, the improvement is noticeable.

SM: I'm glad to hear that, Fred, because Bernie Gelbaum was the only one of the beginners who really didn't do the job right. And I was Chair of the Academic Senate when they reported the outside review committee. It was awful.

FR: Yes, it was awful.

SM: Oh, I could have died.

FR: Yes. Well, mathematicians are a strange breed. That's what I've concluded. (chuckling) But nonetheless, I think they've had visiting committees of quality to point out the problems and say do something. And, very importantly, they . . .

SM: They've put it together.

FR: They have done much better.

SM: Question four, in general, how has your department progressed? I hear such good things about Physics, you know, when I go around the country.

FR: I think that, to be brutally frank about it, that we have a good second-class department, reaching up to be first-class, and that there are pockets of superb excellence--and I'm speaking in particular of Chemistry and Physics. Speaking of Physics then, there are a few activities that are just world class. There's no question about it. And, of course, if I talk about what I've been doing, this is immodest, but nonetheless the fact is that the work that we've been doing in this area has been well recognized, by all the standards that one has, honors and what have you.

SM: Let's jump to that question [over the teaching] to the record to your work. In lay terms, what is it that you've done that's really been . . . I know it, but I want the oral history program to know it.

FR: Well, we've been interested--small groups of us--for very many years in understanding--detecting and understanding--the characteristics of a fundamental particle called the neutrino. We perceive this little object all over the world for, as I say, a great many years--perhaps, you know, since 1950 something. And I've carried the nucleus of the group with me wherever I've come or gone, since leaving Los Alamos. The particle we're talking about is a rather strange one in the

particle zoo. It interacts extremely weakly. It can penetrate astronomical thicknesses of matter, which means that it interacts so weakly that you must have special systems to see it, large, et cetera. And we have studied the characteristics after first detecting it back in Los Alamos days, where I was before, up through 1959. Since detecting it, we have actually looked for its characteristics and have tested it as a probe for the interactions of nature which involve the particle--so-called weak interactions. So deep they must be if they go through light years of material without interacting. And we've followed these things at nuclear reactors, we've followed them in the cosmic rays, this big ray that comes from the heavens and the distant stars and so on. We've followed it not only terrestrially, the neutrinos that can be seen in the atmosphere, not only at nuclear reactors, but also we were privileged in the last couple of years to, in effect, be part of founding a new area of astronomy called neutrino astronomy.

SM: Yes.

FR: There is a supernova which was, although predicted--not that particular one--but although supernovae have been predicted and much is known about them, they had never been seen by the light of neutrinos. And we were fortunate enough to be the group that saw it. We participated and got a prize for it, a share of the Rossi Prize it's called, and so on.

SM: Oh, I read about that, yes.

FR: Yes. And so there are other . . . If this continues, hopefully, not only my interest but with the leadership of the younger people . . . And that's a point I'd like to hold forth on briefly. It's my thought that an educational institution is one in which people grow intellectually, they mature, they produce, that the institution produces through its workings the cadre of tomorrow's leaders et cetera. The educated people of tomorrow: that's our prime goal. And there are several young people, who are no longer very young, but people who are doing precisely this. And there are some new projects involving not only neutrinos but gamma rays, very energetic rays which are like those of light but much more energetic. And such a system as this has been thought through based on worked with the group and so on, (inaudible) through and put into the form of a proposal to study this gamma ray astronomy and neutrinos, to follow these things along.

And then there is another area that I haven't mentioned, which I have been interested in but have contributed not in a primary way, if you will. And that is a process called double beta decay. Instead of the nucleus changing by spitting out one electron, which is called beta decay, it spits out two and it's called double beta decay. It turns out to be a very rare process and people have searched for it for decades, maybe forty years since the first idea that there

might be such a thing was put forward. Well, someone in the neutrino group at UCI--in this case Michael Moe . . .

SM: M-O-E, is it?

FR: M-O-E, yes. He's not an Oriental. I mean, the name (inaudible).

SM: Yes, I know that.

FR: Yes. He has actually, with some of his collaborators, seen double beta decay; so there are a few landmark records, and he continues to study it. There is one characteristic of all these. There are some others, too, but there's one characteristic of all this, and that is they aren't sort of a fly-by-night, do it and come by, do it and leave, sort of thing. They take literally years, literally even decades. There have been various . . . Almost every successful search has been the product of work that's gone on for as much as twenty years, in some cases.

SM: Gee!

FR: So it's a field that doesn't excite people who want to get rich in a hurry.

SM: (laughter) That's funny.

FR: So we look for fundamental rare processes, as it were. It turns out they're fundamental enough that they turn out to be rare and take a long time to go at it. We look for various things of that sort. Well, that's perhaps enough in that direction.

SM: Well, I think that's very interesting. The important thing for me here, Fred, is I hadn't realized you were the coach to a small group that will carry on the flag for you.

FR: Well, they'll carry on their own flag.

SM: Oh, I see.

FR: Which is exactly what I think they should do. And I think their taste is excellent and their training good.

SM: Now that you have a nice new Physical Science Building and I saw you there last week.

FR: Well, how about that, yes.

SM: Do you enjoy the new office?

FR: Yes.

SM: And you're leaving the mathematicians over in the other building. (chuckling)

FR: (laughter) Yes.

SM: You know, some of the chemists will be there, too. I have interviewed Hal Moore and he said that some of the chemists kind of strayed over there.

FR: Yes. Well, that's a whole different problem about that.

SM: Yes, I'm sure it is. I want to know about the teaching record in your department. You are privy to, I presume, the various evaluations that are made?

FR: Yes, but I have rather cynical views of some of these evaluations. What do you do if you find a bimodal

distribution, a clumping at the crummy end and a clumping at the superb end?

SM: Yes.

FR: How do you deal with that?

SM: I do know, Fred, that a fairly good thing that came out of the troubles we had in the sixties and early seventies was one, the teaching evaluation should go off up to the administration, even though they're rather suspect. They're not good instruments, some of these evaluations.

FR: In principle, I think it's a great idea.

SM: It was a good idea. And the second one was putting the students on committees, making them be responsible.

FR: Yes, that is, I think, much more important--by far the most important.

SM: Yes.

FR: But what do I think of the teaching?

SM: Yes.

FR: Well, what impression do I have? My impression is that the Chemistry Department did an excellent job of teaching. And I think that in many ways the Chemistry Department is the best, so to speak. And, of course, subsequently, after my time, which was from 1966 to 1974, of course, Sherry's work is absolutely outstanding and world-shaking, if you will.

And this new person who came, [Peter M.] Rentzepis--[National] Academy [of Sciences] member and all

these great things came with all this. We bought in on something, so to speak--UCI did--rather than develop our own. Well, I'm delighted that Sherry is a UCI product in a very real sense. I think that that's the way to do it, if anyone can. I know that one has to have a certain base on which to build, and so you need some senior people of distinction. And so, Rentzepis, for example, helps provide that, although I don't know how his interactions go with the department.

SM: Well, you haven't told me how good a teacher Sherry is. How good is he?

FR: My judgment is that he's good, because I've listened to his lectures--not in his class, but I've listened to his lectures over the years--and he's excellent as a teacher. And I think some of the other people are also excellent teachers. But Chemistry has a good record. In Physics, I think that it's not bad, but there are a few people that somehow just don't communicate, not as well as they should.

SM: What do you do about that? Is there any way of jacking them up?

FR: Well, way back in the beginning, which is in the early time, we find some people that just simply weren't with it. And in one case we didn't give tenure, and in another case, we got the individual traded off in Computer Sciences instead of Physics. You can guess who that might be?

SM: Yes, I guess, I know.

FR: And we shifted around like this, trying to find ourselves. That reminds me of the days when this was supposed to be the computer campus and teach everything by computers and so on.

SM: Oh, yes, Ralph Girard's.

FR: Ralph Girard and then a couple of other people.

SM: We were very (inaudible).

FR: And I think that the use of computers in education has been improperly set. A computer is a good thing, provided you use it sensibly. You don't use it instead of a human being. You use it as an adjunct to the human being. You don't use it instead of a precept or something in physics. We use it where it does number crunching and you have to develop . . . That's a little bit harsh on the use of computers. There's a lot of use that makes sense. But, basically, computers should supplement the live person, rather than replace them. And we had, unfortunately, for a few years been laboring under this other assumption, presumption, that was brought in with the founding of the campus.

SM: How do the mathematicians teach? It's rather ironic that Bernie Gelbaum, and I think you may remember, in the first year, he was voted the best teacher.

FR: Yes.

SM: And the students were in the large lecture hall, so we're talking about a big class. And he was very absent minded,

he'd forget where he'd leave his bicycle--the students bought him a bicycle. Did you know that?

FR: No, I didn't.

SM: They bought him a bicycle and they tied it up to the top, you know, to the Science Lecture Hall, (inaudible). (chuckling) I think he was very pleased to get a bicycle. How did math do? I mean, is there (inaudible).

FR: My impression is not well. Their research was not up to snuff at that point.

SM: I interviewed Jim March, as you know.

FR: Yes.

SM: And I asked him on this question of math, because had a real interest. Well, he was a real horse trader and he would trade with Bernie to get positions, so that they would teach his, at that time, two years of college math. And I think they just raked in some poor prospects. (chuckling)

FR: Yes.

SM: Now, the next question, are you pleased with the new building? And were you consulted when the plans were drawn up? Did you as a professor involve yourself?

FR: I'll comment. First the positive side. I like the appearance of the building very much, I really do. I think that's very nice.

SM: Yes, handsome.

FR: And, indeed, with respect to space, its character, its allocation and so on, justifying the building and so on, I think that that did involve people in the various areas--the Physics Department, for example--so it did engage the attention of the professors. So everything sounds fine. There is a current problem plaguing people that almost drove one of the professors nuts--really terrible. For instance, if the fire alarm goes off, as it did, was it yesterday morning? If the fire alarm goes off--maybe it was the morning before--it's a piercing shriek. If you're in the building, in most parts of the building, when that goes off, it can literally drive you out of your mind. And if this sounds as though it's a made-up thing, it's not. Ask Doug Mills who got an incredible sound.

SM: (inaudible)

FR: That was one point. Now, why does it have to be that way? Why can't the sound level be down? There are some regulations or some crazy things that have militated it. Something has to be done about that, for instance. Then there's another feature. When we first came in the building about a month ago, it was very difficult to pull your door open because of the air pressure differential between the inside and the outside--really difficult. It was so hard, before it was repaired to some extent, that you'd pull with both hands and you could end up slipping and breaking your arm. It was just

unbelievable. Well, the point is that the air pressure throughout the system has not been properly balanced, for instance. And whether it can be properly balanced, or the extent to which it can be, is a question. Also, you're supposed to keep all the doors for all the offices closed all the time. That's just not a way to run things.

SM: Well, you can't interview a female student unless you have the door open.

FR: Yes, but that's a different reason.

SM: Yes, it's a different reason (inaudible) air conditioning.

FR: I'm talking about the fire marshal kind of regulations, you see.

SM: Oh, I see what you mean.

FR: And also, if you walk up the hall . . . They have fixed this partially, but it's still not good. If you walk up the stairs, there is a door at the bottom of the stairs. It's level, you see. And you open the door and you let go of it, it comes closed, and the roar is like a tremendous big cannon.

SM: Really?

FR: It is. And it echoes and echoes and echoes.

SM: Oh!

FR: So there are these things which should be minor, but which are driving people out of their tree.

SM: What a shame. That's a shame, Fred.

FR: After all of the efforts and so on, to have these incompetents working on it, and it has to be fixed. Otherwise, in the long term, the building is unsuccessful, to put it mildly.

SM: Oh, yes.

FR: Well, I'm sorry that this is the negative side. I hope and expect that they'll repair these things eventually, although it has been quite a time.

SM: I want to hear when. That's too bad.

FR: (inaudible) yes.

SM: Now, let's take a little bit of walk around before we go to [questions] eight and nine. You're interested in music and in the fine arts, and I see you at the concerts and ballets, and the plays, and I notice they formed a group. I guess Bob Cohen did. I didn't know about it, but I'm thinking of joining it. What is it? The Patrons of . . . You're a Patron of the Fine Arts.

FR: Yes, something like that. Yes, Sylvia and I.

SM: That's kind of nice. I suppose you have to give some money.

FR: Not much, not compared to the return.

SM: It's very nice. And what's your reaction, having been on other campuses as you have, and what do you think of the Fine Arts?

FR: Oh, that's an easy one to reply to. I think that it is excellent, excellent to superb, depending on which particular performance you happen to attend.

SM: (chuckling) That's right.

FR: And I'm enormously pleased with it. I've been a fan of Garrison's, Clayton Garrison, before . . . I'm still a fan of his, but somehow life intervenes.

SM: Did you see "Oh, What a Lovely War?"

FR: Yes.

SM: In which he played the part of a sergeant? Did you see that?

FR: Yes, this was a long time ago.

SM: It was the second year.

FR: Yes, indeed.

SM: You came in 1966.

FR: Yes.

SM: And he put that on. It was so funny, I almost died laughing.

FR: Well, "The Good Woman of Szechwan," I remember seeing that.

SM: Yes.

FR: And that was, I thought, excellent.

SM: Today this new dean is a very fine choral conductor.

FR: Yes, I've gone to these. Camerata, yes, I find them very interesting.

SM: And he, I'm sure, he said, "Look, I'm not going to come if you won't let me conduct." (chuckling) That's good.

FR: Well, I think the School of Fine Arts is a gem. The fact that there are problems of one sort or another, you know, basically, it's there, it encourages and enlightens. I think it just makes this place so much even more attractive.

SM: I agree. I agree, Fred. Now, let's move to the faculty housing. What's your opinion of the faculty housing, which you yourself moved to? We were in Melbourne when you had just finished your move. Remember?

FR: Yes, yes. It's been quite awhile now.

SM: Are you happy with it?

FR: I think it's an excellent idea. I think that there are some criticisms that one would level, and I don't want to put it out of perspective by just carping and criticizing, but there have been certain arrangements made about the land. You don't own the land, but we pay tax for the land, in effect. There have been some things like that which haven't really been thought out properly.

SM: I thought they try to model themselves on the Stanford plan, which is where you don't own the land but you own the building.

FR: Yes, that's the way it is, from that point of view. Now, I'm not talking about that so much as the tax base, as it were.

SM: Yes.

FR: And there's a whole bunch of stuff going round and round, and it just seems to me that that wasn't well thought through.

SM: It's too bad. As you know, Fred, when we sat in the deans' meetings back in the beginning, we felt that they should go right to work on faculty housing because even at that time it was becoming expensive.

FR: Yes.

SM: Too expensive for our younger faculty.

FR: Well, I think that's one point. The other, although I don't know what one makes of it, really, but still there is each development, each subsequent phase, had the houses closer together. If we had gone to phase ten, I suppose we'd have the houses on each side close . . . Well, you see the limit. And perhaps this seemed a little bit greedy, if you will. I mean, why not, if you're going to go to all this trouble, make it a little more thoughtful, with respect to space and so on. But all that aside, and despite the trauma of moving that anybody who moves understands, I think it was a good idea. It is a good idea and I personally am delighted.

SM: Well, I'm glad. Bill Lillyman told me that they wouldn't have got three of their distinguished professors if they hadn't had the faculty housing.

FR: I think those arrangements have helped.

SM: And what's his name, he came to the University of London, he's in Psychobiology, and he's just . . .

FR: I know who you mean, of course.

SM: Ricardo Miledi.

FR: Ricardo Miledi.

SM: He, Bill Lillyman, said that he just had to have that housing, you know.

FR: Right. Well, I think it's made a difference and I think that, in general, if one looks through the years, the measure of the distinction of how distinguished an institution is--never mind about the teaching for the moment--is the number of academicians of one sort or another. And that number, as you probably saw in the recent statistics for the institution, has risen and continues to rise.

SM: No, I haven't seen that. Where is that? Was it published for us or what?

FR: Well, I thought that you would automatically get a copy. But it was the vital statistics, or whatever it's called.

SM: Okay, I (inaudible).

FR: And it does has interesting information of the number of people in the National Academy and the American Academy, the Institute of Medicine, Engineering, and so on. When I came to this place, if I remember correctly, I was the only one with anything. All I had was the American Academy. But along with new people . . . Well, Girard and then Steinhaus, somewhere . . .

SM: Steinhaus, yes, just before he died.

FR: Yes, something like that.

SM: The National Academy of Science.

FR: Well, anyway, then the number has increased.

SM: Then [Howard] Schneiderman became a member.

FR: Right, he became a member, as it were, and so on. I think that the number has probably increased far enough so that we can now grow and grow our own. But I think there'll always be the temptation, if one can get a hold of one of these guys and persuade them to come. Irvine, for instance, this happened in the School of Biological Sciences, but nonetheless it's an Irvine thing. Two years ago--not this past year, the year before that--three people who got into the Academy were from Irvine.

SM: Gee!

FR: There was McGaugh.

SM: Jim McGaugh.

FR: And Miledi.

SM: Miledi.

FR: And I keep forgetting his name, but he came from USC.

SM: Oh, I don't remember.

FR: But, anyway, that's a record of some kind.

SM: It certainly is.

FR: So we're getting lots and lots of brownie points in that direction.

SM: Well, now, Fred, let's go back now to question eight. You now being an exalted professor, having stepped up from your deanship to your professorship . . .

FR: Right. (laughter)

SM: How do you consider the administration? How well do you think they've done? Do you still favor the schools up against the College of Arts, Letters and Sciences?

FR: You know, I haven't thought about that for so long that I don't know how it went.

SM: (laughter)

FR: Let me just say, I think that probably, as far as lifting the place up by its bootstraps and getting better, I think that the most important item--just in talking about it--the most important action was taken by Jim McGaugh when he was Executive Vice Chancellor. Namely, he said we've got to get more people of maturity, and of distinction and so on, and no matter how the budgetary pressures go, we are going to put some money aside to do that. And I think he started this Distinguished Professor, et cetera, et cetera.

SM: Yes.

FR: And I think that was terribly important, for one thing.

SM: I agree. I agree.

FR: And I can't think of anything else directly that matches up to that in its significance, in my view. But what did I think of . . .

SM: Well, are you serving, Fred, on the search committee for a replacement for Dr. Tien?

FR: No, no.

SM: I mean, it's an incredibly large committee. It's like twenty-one people.

FR: Well, that's another subject which is current, of which, of course, I've got lots of views, but I don't know that it's appropriate here and now.

SM: Well, you can speak about them and what you think. Jack Peltason (inaudible). I was Chair of the Academic Senate, the Chair has a say, you know, in those search committees.

FR: Yes.

SM: And I used to be on it and they were . . . Once in awhile these committees, I felt, were slanted in a way. So I would ask that someone be taken off before it was accomplished. But we never had more than eight people on a search committee.

FR: Well, I've been on a search committee which resulted in Jack Peltason. I had a key part in that, actually. Tien, I had a key part. I wasn't chair of it, but I was on that committee.

SM: Mike Johnson was the chairman.

FR: Yes. And also the directors at Los Alamos, but that's a separate sort of question. Well, I have some feelings about that. I'm not particularly attracted to the notion and to the arrangements that were made with respect to Tien. And I really can't . . . And also what's happened directly, the academic plan . . . The departments put in academic plans which were, essentially, as far as Physics goes, I know in

particular, were just disregarded. They just didn't pay any attention to what was going on.

SM: They, meaning Tien? His office?

FR: Yes, his office. And they effectively threw away what was recommended. It was very heavy-handed, I thought. And I'm not sure just what the reasons for it might have been. This is my distinct impression of it.

SM: Well, now that he is about to leave us in a month . . .

FR: Well, then everything has to start over again.

SM: Oh, yes.

FR: And so we've lost the time, for one thing. And we've lost it, and what kind of arrangements were made, et cetera, so that he could come and go in the period of time, which was just enough to be disruptive, beats me.

SM: Well, that's bad. I'll tell you why. It's only a small thing. I ordered him to come for an interview. And I made the arrangements before he got the chancellorship. But once he had the chancellorship, he had a calendar which was very difficult to fit into it at all. He was away, et cetera, at Berkeley.

FR: Well, I'm not so much criticizing him as I am the situation which led to this particular arrangement. That's really, I think, wrong. It shouldn't be. And then Jack staying on in a special way, to make it possible for them to find a

chancellor at Berkeley or something, I just get the feeling that we've been somewhat misused.

SM: Well, I think we're definitely . . . I know, I was talking to Spence Olin and he was very unhappy. "We're just a farm team," he said. We train the person who goes on up . . .

FR: Yes, yes.

SM: He goes up to Berkeley.

FR: But I wouldn't put it like that exactly.

SM: Well, he's putting it like that. (chuckling)

FR: Yes, well, of course, he may as he pleases. But what worries me most is that we have lost two years.

SM: That's right.

FR: And there's just no recouping that. And we've lost it at a time when things are sufficiently uncertain and improbable and so on.

SM: Yes, I agree, Fred. I think it's really unfair. I was very annoyed, when so much effort was made to get him and then . . .

FR: Yes, I remember being on the committee and meeting and worrying and so on, and the decision we took. My evaluation, and maybe it was our general evaluation, was that here is a guy who's a powerhouse and he'll either do very well for the institution or he will disrupt the hell out of things.

SM: And the latter happened.

FR: This was what we . . . Well, there's a risk, as it were.

SM: But there's always a risk.

FR: Yes. We didn't factor his imminent departure into this.

SM: Well, I didn't think Mike Heyman--however you pronounce his name--was going to retire. I was present at his inauguration. I was Chairman of the Academic Senate and [he was inaugurated Chancellor].

FR: Yes.

SM: Well, the lack of administration, generally, Fred, I said, "How well do you consider the administration has done?"

FR: Well, I think there are parts of the administrative system which are . . . And one gets now to talking about people, but, well, Lorie Reed has been less than excellent.

SM: Of course, she's leaving us right now.

FR: But that's in the past. That's just a fact. And a lot of the paper shuffling and the lack of decision and the confusion and so on. Many people . . . many of us would lay to her desk. That's one.

SM: Well, I think you're right.

FR: And then there's Mary Louise . . . Oh, gosh, I should know her name.

SM: Which office is she in?

FR: She's in Tien's office.

SM: Oh, I don't know her.

FR: Mary Louise Keating or something.

SM: I don't know.

FR: Something like that. She was involved in the rewriting of the non-acceptance of the Physics Department plan--it is presumed or thought. And it wasn't Tien who did it, but she was working for Tien. So I don't know. I think that there is . . . This two-year business is (inaudible).

SM: Well, I think we've lost two years.

FR: You can say that again.

SM: And I think the general administrative notion where a dean remains a dean for a relatively short time, a chairman has to be reviewed, a department has to be reviewed . . .

FR: Yes, yes.

SM: There's an external review, an internal review.

FR: Right.

SM: I think that in theory it's all pretty good. And our salary scale is good.

FR: Well, yes. As I was saying, when one criticizes, they tend to forget that there are good parts about it.

SM: Yes.

FR: My feeling about the administrators all the way through, except for this recent problem, unique problem, has been that they would listen. I felt that they were okay guys all the way through.

SM: Well, have you any suggestions now, Fred, for me? I've got to sit down and write a history of UCI.

FR: Right. Oh, my goodness. Let's see, what, if anything, did I scratch down here. I just have a feeling that what I've been saying is by and large inadequate.

SM: Not at all. I've learned a couple of very important things, Fred. I'm very happy that you have a group around you who are going to go on and do their thing, but that follows in your footsteps. I'm very unhappy, for example. I've developed a . . . Well, let's take Arthur Marder. He really did a terrific job in building our library, building a modern British navy, modern European history and modern English history. No one replaced him, exactly. They were not in his field. When I retired, my field was the Commonwealth British Empire. And by the way, John Galbraith, John S. Galbraith, who was the Chancellor down at San Diego, no one replaced him. And he's got [left] a wonderful [library] collection. He followed on my mentor, Frank J. Klingberg. Why, they've been developing British Empire material, Commonwealth materials-- I'm talking about thirty, forty years, and they never replaced him. And all that library sits there, you know. Of course, if visiting scholars come, okay.

I'm on the Pacific Rim. Australia and New Zealand is my main interest, (inaudible) too. And then they did not replace me, they replaced me with a person in Japanese history. He's a very delightful fellow, this young assistant professor. And bright as a button, and the next position went to China.

China is his field. But I think that's the other end of the Pacific Rim. (chuckling) What can you say? Australians call it the "near north," as you recall.

FR: Oh, as you have been talking, I've been thinking a little bit about one of the sub-discussions we've been having, and that is that I was rather surprised and delighted when I stepped sideways or up, to become professor instead of dean, from the vantage point of view of a professor, the system was much quieter, much more compliant and so on than when sitting in the dean's chair.

SM: (laughter) In the dean's chair!

FR: In the dean's chair, it seems to me that we would discuss problems, difficult problems and resource discussions, et cetera.

SM: And regulations.

FR: And regulations, from which the faculty by and large were shielded.

SM: That's true.

FR: And I think that . . .

SM: Well, that's the sign of a good dean. I figured we've got to solve our own problems and keep things quiet and steady so that the . . . and keep out of the way of the professors so they can do their work, and keep our problems out of their way, keep people out of their way, too.

FR: But that's the other, that's stating what I concur with. That is, the job . . . The most important person in the institution is the professor.

SM: You're right, Fred.

FR: And that the dean's job, the administration's job, is to serve the professor.

SM: That's right.

FR: And I don't think that many deans feel that way about it. It's their School and, by gosh, you know, they're going to divest themselves. The question is, how do you serve the professor and make it possible for him or her to do the job? And so, going from dean back to professor is not a demotion. It's not stepping down or whatever. I don't regard it that way. Now, in that regard, the professor of . . . Let's see, the dean . . . Another aspect or characteristic of a dean, for a dean to sit and listen to a problem and then say, "Now, when I was a young man, it was thus and so," is fatal.

SM: (laughter)

FR: The situation changes. And deans that have simply become administrators, as it were, and are no longer scholars, are incapable because they don't know--they aren't living with it all the time--are incapable of understanding what their supposed to be deaning about. And so this was something I found attractive, mainly, the situation was that the department or School at that point early on was so small that

it's possible to be a dean, a faculty member and research person--all these kinds of things.

SM: And serve on the Academic Senate as well. (laughter)

FR: And serve on the Academic Senate. Indeed, I recall being the CCGA chair for the institution, for the whole university and a few other things. That not only was possible, but it makes it . . . It's important if one is to keep in mind what the job is.

SM: Yes, that's right.

FR: So you have to (inaudible). And it also suggests that deans and so on should not be deans forever, because it's a terrific load, as you know, to carry all these things on.

SM: Well, that's as I said before, they serve for a relatively short time and that's good.

FR: Right. I think so.

SM: Well, anything else for me to consider and think about?

FR: Gosh, I don't know, Sam. I hope this is of use to you.

SM: Oh, yes, it is, it is, Fred. And I find a number of things you've said very helpful. And I will have the transcript sent to you in a week or ten days.

FR: Oh, my heavens. (inaudible) Well, I'm going to be leaving town for a week or so--well, essentially, for a couple of weeks, starting a week from tomorrow.

SM: And how long will you be away?

FR: I think two or three weeks.

SM: Okay, I'll get it to you after you get back.

FR: Yes.

SM: Okay. Well, thank you very much, Fred. I enjoyed that.

END OF INTERVIEW