

**Transcription of Oral History Interview with
RAYMOND L. ORBACH**

August 17, 1998

Erickson: I understand you're a native Californian. How did your mother and father come to California?

Orbach: Well, my mother was living with her parents in Binghamton, New York. My grandfather, on my mother's side, was a furniture refinisher and came out to Los Angeles, primarily because of the weather. My grandmother, my mother's side, had tuberculosis, and there was a sanitarium that she as put in, needed the heat and warmth of Southern Californian.

My father was working in a drug store in Chicago, and I think the Chicago weather ultimately drove him west which is exactly the same reason that Eva (my wife) and her parents moved to California.

My parents met here and were married in the middle of the Depression in 1930, bought a house on Sycamore Avenue in Hollywood, which my mother still lives in and in which I was raised all of these years, so we are a fairly stable Hollywood family.

Erickson: I'll say. Do you have brothers and sisters?

Orbach: I have one sister. Her name is Donna. She is three years younger. When I was born in 1934, that was the height of the Depression. My sister was born in '37 and my parents were working people and had difficulties then, and so the family was kept small. They didn't want more children.

Erickson: Sure. Do you remember any of the effects of the Depression growing up?

Orbach: I don't remember anything about it.

Erickson: You were so young.

Orbach: Except, I know how hard my father worked and my mother, and I remember the love of FDR, because he was the one that made their lives possible, that gave them jobs, that he cared. So I was brought up a Roosevelt Democrat.

Erickson: Sure, sure.

Orbach: And I remember vividly when he died, the feeling of the family of loss.

Erickson: What kind of jobs did your father take in the Depression?

Orbach: My father worked in a dry cleaning establishment initially, was a delivery person for a dry cleaner. During the war he became involved in the metals industry, the scrap industry and production of aluminum, and then machining of aluminum and steel that was required by the war effort.

Erickson: Oh sure.

Orbach: He joined a company called Central Metals which was established during the war and then stayed with them as they changed named to the Deutsch Company and worked with them continuously until his death.

Erickson: Oh, my goodness. What interested you in science, Ray?

Orbach: I don't know. (laughter) When I was growing up and when I was in junior high school, I remember playing with chemistry sets. I was never very good at it, but I enjoyed them, and I enjoyed the things that they did when you mixed chemicals together, much to my parents' consternation, I might add.

Erickson: Did you have any disasters?

Orbach: Oh, of course. (laughter)

But I was also interested in biology. I collected reptiles. I collected poisonous snakes which didn't enamor my project to my mother, nor to the neighbors. But I was involved in science at an elementary level as far back as I can remember.

Then in junior high school when I was in the eighth grade, I had a science teacher who was serious about science and taught it in a way that finally made sense to me. He finally gave me a feeling about why a quantitative background was important. And I fell in love with it.

I remember even as long ago as then that I told my teacher that I was going to go into science, that I was going to go to Cal Tech and be an undergraduate and be a real scientist. And I still can't figure out why I made that comment to him, but in fact that is exactly what happened.

And then in high school I was very, very interested in mathematics and science and had some wonderful teachers.

Erickson: Did you? An where was that?

Orbach: That was at Fairfax High. At that time, Fairfax High was very strong academically but not as much as it might be.

I remember playing hooky when I was a senior and going to Hamilton High because they had a wonderful physics teacher that I had had in summer school the year before. So I ditched my fifth and sixth period and went to Hamilton for physics.

Erickson: Not for fun, but for physics.

Orbach: For physics. (laughter)
That was not looked well upon by my Principal at Fairfax High but gave me a sound basis on quantitative material that served me well as I went through mathematics and then ultimately to college.

Erickson: And where was that?

Orbach: That was at Cal Tech. I was an undergraduate.

Erickson: You did get that. That's great.

Orbach: At the time, I don't think I appreciated what I was doing or how hard it was to get in. I just assumed that I would get in.

I remember taking the SAT exam (at that time it was called the College Board) and not thinking much about it particularly. I got good grades in school, in high school. I was Student Body President, was involved in all kinds of activities. And again I didn't pay much attention, and I see that now as I talk to high school students.

It's a very fateful decision as to which college you choose, and whether or not you get in. But somehow in high school, most students, or at least myself, didn't really think about it in those terms.

I did go to Cal Tech for four years. I was on a scholarship. My parents helped. I also worked during the summer. I also worked during the school year at Cal Tech.

Erickson: Did you? What did you do at school?

Orbach: I worked about half time, 20 hours a week, at what was called the Calibration Laboratory which was a laboratory for instruments to calibrate them against standards. I knew nothing about what I was doing, but it was a good paying job, and I had a laboratory to myself, so I taught myself.

Erickson: You learned a lot.

Orbach: ... how to calibrate ammeters and voltmeters. This was before the digital age. Everything was analogued, and temperatures and the like. It was a good job.

Erickson: And then where did you go for your graduates work?

Orbach: When I was at Cal Tech, I became interested in what was then a new field, called solid state physics, and the book I had was written by a man named, Kittel, Charlie—Charles Kittel.

And he was at Berkeley, and I decided I would go to Berkeley because I liked the books I was reading, and I would like to do research with him.

Little did I know that he was so famous that students from all over the country were coming to Berkeley with exactly that intention.

Erickson: Oh, sure.

Orbach: Again I did not know what I was doing, but I decided that is what I wanted to do.

Erickson: Well, you were making the right decisions, even when you were unaware.

Orbach: It turned out that way. And another thing I did was—the Cal Tech background was so strong that I felt it would be better to take the comprehensive exam at Berkeley immediately, rather than waiting a year as most students did. That gave me a jump on the other students of my class, and I was able to get accepted by Kittel for thesis work in my first year of study.

And that began my career in what we now call condensed matter physics.

Erickson: And so you have your Ph.D. from Berkeley?

Orbach: Yes, I got my Ph.D. in January of 1960 from Berkeley.

Erickson: Now you have some other very famous and distinguished schools in your background, too. One of them is Harvard and one is Oxford. In which order did that happen?

Orbach: Oxford came first. In those days, 1958 was a key year. That was the year that Sputnik was sent up by the Russians. And those of us old enough to remember will recall that the United States was just shocked, that we were always imagining ourselves to be the superior country technologically as well as economically.

The Russians sent Sputnik up, our Vanguard Missile never did work, and we were shocked that they on apparently their first try could orbit a satellite.

The United States reacted as typical democracies do by going flat out in the technological area. Scholarships became available. Fellowships became available. Science became important for the United States.

And I was able to profit from that atmosphere. When I graduated Berkeley in 1960, the National Science Foundation offered Post Doctoral Fellowships. Now to us, they may have seemed very cheap and very low, but to me as a graduate student, they were incredible. They were \$5,000 a year?

Erickson: Oh, you mean the amount?

Orbach: In terms of the money, but I could use where ever I wanted to go. And I had met Roger Elliott, a very distinguished British physicist at Berkeley. Berkeley was the center of intellectual activity in my field at that time, because of Kittel.

Erickson: Even more so than Cal Tech had been?

Orbach: Oh, yes, in condensed matter physics they were much better. Cal Tech specialized in high energy, different branches of physics. But Cal Tech was special for its area, and Berkeley was special for its area.

Berkeley also had a large experimental program, a radiation lab and the bevatron, but in my case I was doing work down on the campus in condensed matter physics. And I applied for a Post

Doctoral Fellowship and was successful, and Eva and myself and our first son, David ...

Erickson: We need to back up, don't we? When did you and Eva meet?

Orbach: Well, we met when I was a sophomore, between my sophomore and junior year at Cal Tech. Eva had just graduated from Fairfax High School.

Erickson: Did you know each other?

Orbach: No. She was two years behind me at Fairfax. I was Student Body President in 1951, and she came in 1951—that same year. We hardly knew each other, in fact not at all.

We both belonged to an honorary organization and that organization needed to get more active, and I was asked if I would have a summer party for members of the organization, both current and graduates. Eva came to it, and that's where I met her.

Erickson: Oh, that's nice.

Orbach: That was in 1954, and we married in 1956 and moved to Berkeley, where I started my graduate work, and Eva was then a junior in college. She had gone to UCLA as a freshman and sophomore. And then at Berkeley we were students together.

Erickson: Ah, that's nice.

Orbach: We in fact had an NSF Pre Doctoral Fellowship which paid \$160 a month which we felt was fantastic. And we lived well as students can.

Erickson: Great.

Orbach: An at the end of Eva's two years, our first son was born—David, 1958, in July, just after Eva's finals.

Erickson: Oh good.

Orbach: That's a story in itself.

Erickson: The timing was good.

Orbach: And then we went to England two years later. David was two in 1960 and our second child, Debbie, was born in April of that year. So Eva was six months pregnant when we took the ship from New York and went to England.

Erickson: Was that alright?

Orbach: Everything was fine. Now days, we wouldn't even think of doing anything like that. But again we were college kids. We learned about National Health, and Eva was in the hospital, I think, for ~~eight~~ five days which is rather different than current practice.

Erickson: Different from here?

Orbach: And we were very well treated. It was a lovely time. And Debbie was born while we were in England, so she has dual citizenship, the only one of our children. So we had two children, and we were living on \$5,000 a month, not a month, I'm sorry, a year.

Erickson: I knew you were going to say that. (laughter)

Orbach: We stayed at Oxford from January through September of the following year, about a year and a half. And that was an extraordinary experience for us. I had never been out of the country.

I got used to a different kind of education and research environment. Berkeley was flat out. Everyone was running at full speed. It was a very intense environment. Oxford, to an American, seemed much more laid back, much more cautious

and calm in the way it approached science. So it was a very good experience for me.

Erickson: Did it take you a while to adjust to that though?

Orbach: Yes, it certainly did, (laughter), and I'm afraid I conveyed with me all of that "hurry up and rush" that the British characterized the Americans by. It was true, but we made many friends there, and it was a very successful period for me and for Eva.

Erickson: Great. And then did you go to Harvard after that?

Orbach: And then at the end of September in 1961, we left for Harvard where I was an assistant professor. That is a beginning, non-tenured position in the School of Engineering and Applied Science.

In those days condensed matter physics was not regarded by many schools as pure or honest physics. It was more engineering than physics, and Harvard was one of the leaders of that tradition, as indeed Yale was as well at the time.

That has all changed since, but in those days, I was in an engineering school where in fact there were many other fine physicists—Bloomberg, who later won the Nobel Prize in physics, was a member of the School's faculty.

And I taught condensed matter physics to graduate students at Harvard. But the high energy physics was all carried out in the Physics Department. So some students would come across from physics to engineering and applied physics just to learn what was happening in condensed matter physics.

Erickson: Did you enjoy that?

Orbach: We enjoyed it very much. It was nice to have come from Oxford, because we had come from an institution which at that time was almost 900 years old, and coming from California through Oxford to Harvard was the right way to do it. We saw

Harvard as a very fine institution, but we were not quite as reverent as we might have been had we gone there directly.

Erickson: Oh, that's interesting.

Orbach: We knew about tradition and achievement and the years of success that Oxford had known. And that helped for us to make the transition.

Harvard, at that time, had a policy—it may not have been a firm policy, it was true more often than not, of not promoting its assistant professors. It would go outside and bring in a very senior, distinguished, full professor, and so it was a mill for assistant professors.

Erickson: I see.

Orbach: And I knew that of course when I went, but while I was there, Harvard did in fact appoint a senior person in my field in the School, and I figured that was it. There was probably very little chance that I would get a tenured position there. So I began looking around, and UCLA at that point in time was just beginning to build. This was the early '60's.

Erickson: Who was Chancellor then, Ray?

Orbach: Murphy.

Erickson: Murphy.

Orbach: Murphy was Chancellor, and he brought UCLA into the modern era. He made a real university out of it. And when I came for a visit—first of all we came at a point where there was a freezing rain storm in Boston.

Erickson: Oh great (laughter). Good timing.

Orbach: And LA was gorgeous. It was sunny and warm. And that helped a little bit. But I found that UCLA had opportunities and directions that were more or less precluded at Harvard.

First of all, I would be in a physics department, not in a school of engineering in applied physics. So I could get physics students, physics graduate students.

I would also be there with the other physicists, because their information and background was important.

Erickson: That is important.

Orbach: ... for my own research. Physics is not compartmentalized. People move back and forth across fields. You may specialize in one area, but the mathematics you use is general across the field. So if you are not with other physicists who are doing work with the same mathematics as you are, it tends to be confining.

At UCLA, I found a young department, one that was eager to grow, that wanted to be very good and where I could make a difference. I also wanted to do experimental work, and I found that hard at Harvard because there just weren't the resources or the opportunity to do so.

So I was able to set up a laboratory at UCLA in addition to my basic work, which was theoretical physics. So we came to UCLA in the winter of 1963.

Erickson: And you came as a professor then?

Orbach: I came as an associate professor, which is a position with tenure at UCLA, at Step II. By that time I had a nice publications record, and I think UCLA felt I was worthy of tenure. And so I was given a good position.

Erickson: Great, and how long did you do that?

Orbach: Well, I was at UCLA for a long time. I stayed at UCLA from 1963 in the winter until April of 1992 when I came to UC Riverside, so we were there for almost 30 years.

Erickson: But along the way didn't you go from being a professor to administrative work?

Orbach: Yes, I had two experiences with administration. The later '60s -- remember I arrived in 1963 -- that was the point when the Free Speech Movement was just beginning to blossom.

But we had come from Berkeley, and the Free Speech Movement at that time was a shadow of what it later became. And as the foment increased, I began to worry about UCLA and Berkeley and the future of the University of California.

It was a turbulent period. With Kerr's firing, I felt that politics had entered the university. It's funny when people talk about it now, for it was far worse then than it is now, at least in my view.

And I began to ask what we could do at UCLA to try to head off some of the frustration and cynicism that students seemed to experience at Berkeley, so I started a program that was at that time was called Education and Society, which was a program where students themselves could develop programs with faculty in areas of relevance to their academic curriculum.

Orbach: That program was started in 1968, and you know what happened then.

Erickson: Yes.

Orbach: And by 1970 when the killings occurred at Kent State, it was very successful. We had offered perhaps a dozen courses at that time.

Erickson: What kind of courses were they that were established?

Orbach: Well, I taught one for example on arms control, that is a physicist teaming up with a political scientist to talk about the

issue of disarmament, the issue of nuclear weapons, the so called delicate balance of terror.

The student body at that time was eager to unilaterally disarm. Remember this was the '60's. They didn't like atomic weapons any more than anyone else does, but they wanted the United States out.

And we offered a course to talk about what that meant, and particularly the issues around arms control, because a lot was happening then. There were negotiations internationally for a test ban treaty and other treaties.

The instability, stability of nuclear weapons was just being addressed, both strategically and in terms of weaponry. So that was, of course, where the students, I thought, had a very good background.

We had a simulation at Rand. We gave them a pretty good introduction to arms control methodology and to what was happening at that time on a world-wide basis.

We had other courses dealing with politics. You may remember in 1970 there was the Kent State killings, and that University was shut down. Our students wanted to do something.

We offered a course in the fall on the elections which were that November, encouraging the students to go out and study the process of elections to understand the basis of the American democracy better. We tried to do everything on an academic basis, but to make it very real, very current to the students.

Well, I was told that really the only way to do this was if I took charge of it, so I became an Assistant Vice Chancellor for Academic Change and Curricular Development. That was the full title. Then it was on the basis that they wanted somebody full time to handle these programs. So I had an office, and I became an administrator.

Before I assumed office, Governor Reagan closed the University of California, and I remember looking out my office window at UCLA and seeing cordons of police with motor cycles and helmets and shields closing the campus down.

Erickson: What a sight.

Orbach: ... And more cleaning it out. Up until that time, I never felt that universities were delicate. I always assumed coming from Oxford and Harvard that universities would be around forever. Then I saw the University closed. It was a very frightening experience, one again that I will never forget.

In the even, that was Monday, Thursday was the first day of class, and I was teaching freshmen physics at the time, and I didn't know what to expect.

Erickson: No.

Orbach: Because the students were coming back on the campus. There was a very strong feeling of protest and anger, frustration.

Erickson: And the police were still there?

Orbach: The police had gone, but they had left their mark. Students and faculty had been attacked physically by the police. Police claimed provocation. We will never know. But they left a serious mark on the campus.

I was teaching freshmen physics as luck would have it, and I remember vividly students coming into my class and asking whether they could have some time.

These were students who wanted to have an alternate form of university experience to talk to the students in my class. And I said, "I will give you five minutes or seven minutes, but then I want to teach my class." And they said fine, so I went out and gave them seven minutes and came back. I noticed when I came back there were TV cameras and sound booms. This was all for

all kinds of purposes. And then I started teaching physics. And I was very disappointed when they all left.

Erickson: Oh, that's too bad.

Orbach: The students stayed. The demonstrators weren't interested in learning physics. In any case, I felt very strongly about the University continuing its function. I was very concerned that the rebellion would interfere with the academic process and injure it. A lot of other faculty did as well.

Somehow we came through that horrible, horrible time. The students look back on the '60's now with some admiration, but I just shudder, because it was a ghastly period.

The students themselves suffered greatly as a consequence. They skipped class because it wasn't relevant. Some of our faculty never recovered from it, because they felt they were impotent, they weren't able to effect events.

Orbach: It's left a scar on a generation of America that will never be healed. It will eventually get older and die, but it will never go away through any kind of rational thought. So it was a pretty horrific experience.

I did that for two years. And then almost as quickly as it came, it seemed to ebb and disappear. And I felt there was no point in continuing that job. And even worse, they institutionalized it. It was *an Academic Senate* committee that was formed to handle the programs that I had started. And I got very worried once that happened because I was afraid the vitality would disappear. It didn't, but it wasn't the same.

So I went back to physics in 1974. And then in 1982 we went on sabbatical. I should say that in the early '70's, I received a Guggenheim Fellowship which I had applied for, and we were in Israel for a year. And that, of course, 1973-74 was the year of the October War. So our three children at that time had to

experience a war first hand in Israel. It was a tough time for the country.

Erickson: Did you feel unsafe?

Orbach: We never did. The Israelis were so wonderful. That didn't occur to us. Our parents back in the States were quite concerned.

Erickson: Were worried? Sure.

Orbach: I don't know why we weren't. We knew a lot. We knew what was happening. We just felt that we would be well taken care of, and we were. But we were in Israel in '73, immediately after I had stepped down from administration.

Orbach: And then I continued in physics until 1982, when I was asked to become Provost at UCLA. At that time there had not been a Provost of the campus. And the College of Letters and Science which was a very large college, at that time 22,000 students, about a 1,000 faculty, was composed of a Dean and four Associate Deans.

And it was felt that the College didn't have a presence, consistent with its importance. And so they wanted to upgrade it by designing a new position which they called Provost. And there was a search committee.

Eva and I were in Paris on sabbatical. I had been invited by a college in Paris called ... we called it "PC" which is a takeoff on the Communist Party initials, but it was Physique et Chemie Industrielle de la ville de Paris. It was equivalent of Cal Tech for the French system. It was actually run by the Paris government. I was appointed the Joliot Curie Professor. Joliot Curie was one of the Curie family and received the Nobel Prize after World War II.

Erickson: Oh, I see.

Orbach: He was a very distinguished person. And he had been President of this school in the late 1940s. Well, we spent the year there, and about halfway through, I was phoned by UCLA, and the search committee had recommended that I be the Provost. So I became Provost of the College of Letters and Science and stayed there for ten years.

And then toward the end I felt it was time to step down, and the position at Riverside had opened up, and there was a search process.

Erickson: Talk about that if you would.

Orbach: Well, I was approached by President Gardner of the University of California to be a candidate. And I agreed.

Erickson: Rosemary Schraer had passed away.

Orbach: No, no, Rosemary Schraer was still very much alive.

Erickson: She was still alive.

Orbach: Yes, that was the tragedy. But at the time. This was in January of '92.

Erickson: Oh earlier, I see.

Orbach: The search process had begun, and I was interviewed by the search committee and asked if I would accept the position.

I remember the search committee very vividly because I knew nothing about agriculture. And there were a couple of faculty here who were on the search committee, and they must still be laughing about my response. (laughter) They said, "You know, UC Riverside is an ag campus. It's a land grant school. What do you know about agriculture?" And I was honest.

Erickson: You had to be.

Orbach: I said I knew nothing, but on the other hand I felt it was very important. In any case I was asked to be Chancellor, and at the Regents' meeting on March 15, I was appointed Chancellor. And then that same day I came out to Riverside. And you may remember, it was pouring rain.

Erickson: I do remember.

Orbach: Rosemary had put together a reception for me at the residence and also a convocation in the PE gymnasium.

Erickson: And it was filled, wasn't it?

Orbach: It was filled, and it was very exciting. It was lovely, and she was wonderful and introduced us in a very warm and friendly way.

Orbach: I was to take over on July 1, and she was then to go into retirement. And she and her husband had all kinds of plans for the future.

And everything seemed fine. I remember the convocation, and the wonderful questions that were asked.

Erickson: And what were they Ray?

Orbach: Well, the first question that was asked was very funny, because I was quite unprepared for it. It was ... remember this was a full gymnasium of people, and I had said some pleasantries, which I can't remember at the present, and the first question was, "Where will you live?" And I remember puzzling over the question as I was responding, "Why would anyone care where I lived."

Erickson: Very important though, isn't it?

Orbach: But I didn't know that. (laughter)
I didn't understand. And so I said very honestly, "In the Chancellor's Residence." And the place blew up in applause,

and I had no idea what I said. What difference did it make? Of course we wanted to live in the Chancellor's Residence.

I wasn't aware of the symbolic value that had for the campus, and the history which I now am aware of. But at the time it was a perfectly honest response. I had always wanted to live on the campus, rather than commuting, so I could be part of it, and Eva, too, so we could really be a family of the campus. That was the one question I remember.

The other questions ... I think there was one about agriculture ... and again I had to say I didn't know anything about it.

Erickson: But I'll learn. (laughter)

Orbach: But I'll learn. It was just a very nice affair. And we had dinner that night. Then I went back to UCLA to try to finish things up.

Erickson: What seemed attractive about UCR to you in this consideration?

Orbach: Well, there were a number of things that attracted me to the campus. In the first place there was a commitment to teaching and education that I felt about Riverside. People had told me that it was very special. It was not like the other UC campuses. And I felt very strongly about that. I taught all my life. I love teaching. I could have gone and done research, without teaching, but I chose the university.

And I felt that our campus, the Riverside campus, had a tradition that I liked very much.

There was also frankly just the opportunity of being a Chancellor. The University of California system is very special, and to be a Chancellor in that system was very attractive. There is not a system like it anywhere else in the world, and regardless of the size of the campus, I would be treated as a Chancellor, and the equal of anybody else. At that time some Chancellors were more equal than others, but I didn't know that. (laughter)

Of course, I came in at the worst possible time when David Gardner and his separation package were the issues of the day. And that was my introduction to the University of California!

I also came in just as the budget of the State of California was in free fall. It was a difficult beginning.

The most difficult, of course, was Rosemary's death.

Erickson: Sure.

Orbach: On April 12, she suffered a stroke and died immediately or almost immediately. And it was a tragedy, for she had looked forward to retirement so much, and she had worked so hard. It was a tragedy for the community, a tragedy for the campus.

I was still at UCLA, and I then became concerned about the hiatus between April and July. I should also say that Rosemary and I had talked a number of times.

Erickson: Oh, did you?

Orbach: And we had discussed getting together, and she would describe for me her ideas for the campus, and where she felt there were opportunities, where there were problems. I was looking forward to learning about the campus from her, and I never got the opportunity.

I asked the Academic Senate, through the President's Office, to make a decision as to whether to invite me or not. I did not want to come and impose myself on the campus this early, but they decided they would like me to come as Chancellor early, and so on April 20, I formally became Chancellor at UC Riverside.

It was a wrenching experience. First of all the legacy of Rosemary's death was so unexpected and so horrible, it made it difficult for everybody. We hadn't even had the memorial service for her when I started here. That came later, and I was very pleased to be a part of it.

But then the issue of running a campus, knowing almost nothing about it, also phased me. There I was very, very fortunate to have the Chair of the Academic Senate, who was so friendly and helpful.

Erickson: Who was that?

Orbach: That was Marv Nachman, Marvin Nachman. He was terrific. He took me by the hand and walked me through the things that were important.

There were many problems on campus, primarily because of enrollment and size.

Erickson: Oh, that's what I was going to ask,

Orbach: But there were problems that addressed themselves because of the difficulty of resources. It had grown very quickly since the late '80's.

Erickson: Excuse me, did you see any remnants of that liberal arts college that had been established?

Orbach: Well, I saw it in two different ways. The answer is yes. That first of all is what attracted me, not so much the liberal arts college, but the commitment to teaching and research that I believe a research university is about. And that was a remnant, that was a carryover from the liberal arts concept that was the beginning of the Riverside campus.

I had seen other examples. Santa Cruz had grown up the same way. It was going to be a campus where teaching was paramount. There would be colleges in which the teaching would take place.

But in the University of California with a single academic senate, and a single standard for promotion and appointment, that won't work. You would have to separate the two campuses

from the mainstream of the University, and nobody wanted to do that.

So it wasn't so much there was anything wrong with being a liberal arts campus. The trick was to marry that with the research function, which, it turns out, that many liberal arts colleges have.

Orbach: For example, Swarthmore is a liberal arts school which happens to have some very fine researchers. Dartmouth is another one. There are many. Amherst is yet another one, very, very fine Eastern universities that have a research focus. Their faculty are very involved in research. And so I never felt that there was a tension between the two, but that was certainly the case. That was point one.

Point two was the difference between the faculty from that period and the modern period. There were faculty who came here with a liberal arts tradition in mind, and they were troubled, and correctly so from their perspective, when they saw the campus, from their perspective, turn from a teaching function to a research function. And they had their point, and my job was to retain what they wanted, while at the same time promoting the research enterprise which was also alive and well on the campus.

And I think that is one of the things that interested me most about Riverside, was mirroring the two functions and showing to the world that it was possible to do both, to have a liberal arts experience and be a top-flight research university .

And I think if anything typifies my goals for the campus it is that. And it's difficult because there are forces and tensions which cause the two to interfere with one another on occasion. But the trick is to try to get faculty who want the same thing, who are committed to teaching as well as research, and who recognize the inability to separate the two. The two are, in fact, really one in the same thing.

That's something I have always felt strongly about. Curiously enough, the Call, the document we use for promotion and appointments in the University of California, also recognizes that. The primary criteria for promotion and appointments is teaching and research, not or.

Erickson: Right.

Orbach: And that is written, and what I enjoy most about our campus, Riverside campus, is our ability to bring the two together.

Erickson: Let's talk about your teaching and your research. You teach undergraduate students?

Orbach: Yes, I used to teach both undergraduate and graduate, but being Chancellor did not give me the time that I had once had.

Erickson: Do you feel that's important though to do?

Orbach: Oh yes. Well, first of all, I enjoy it. Not teaching would be absolutely terrible.

Erickson: But as a Chancellor when you have so many other obligations, you feel it is important to teach also?

Orbach: I do. I do again for a multitude of reasons. First of all, I think it sets an example. I want, just as we were talking about before, I want our senior faculty to teach at the undergraduate level, especially at the lower division level. And what better way to express that than to teach one's self. And so by my teaching freshmen, nobody can tell me they're too busy to teach freshmen. (smile)

Erickson: Right.

Orbach: And we can encourage the very best faculty to teach at the freshmen levels. It's terribly important. It also fits the idea of undergraduate research, because the campus has a great tradition in that regard. And when the finest faculty are teaching a

freshmen and sophomore course, they can encourage them to go into research and work with them for that matter in their laboratory or in their research projects.

Erickson: Have you found some outstanding undergraduates?

Orbach: Oh yes.

Erickson: You have?

Orbach: I've had a couple of undergraduates, freshmen, work in my laboratory. It was exciting, after ... these are freshmen. After the spring quarter and the summer, they were giving seminars at the end of the summer ...

Erickson: No kidding.

Orbach: ... on their research work, and they did a very good job of it. But the main reason is because I enjoy teaching. Now, because of my time, I'm only able to teach one course a year, but it's the freshmen physics, calculus-based course.

Erickson: And it's very well attended, isn't it?

Orbach: Yes. (laughter) It has over 200 students now. It's almost too large, and as our student body grows, we will have to split it. Somebody else will get a chance to teach it. It's been a little awkward, because I'm the gatekeeper. You have to take my course to go into engineering, or physics, or chemistry or mathematics.

Erickson: Oh, I see.

Orbach: And so it's a terribly important responsibility. I just hope that I'm fair in doing the job right.

Erickson: Well, do you think some of the students are intimidated that they are being taught by the Chancellor?

Orbach: I don't think that matters to them, but you'll have to ask the students that question.

Erickson: Sure.

Orbach: My impression is that nothing intimidates students. They are open and free. They will tell you what they feel at any point in time.

The first time that I had my office hours, which are in the Chancellor's Office, they were a little intimidated. And so we put up a big banner which said, "Physics 40A Students." And they came through the door of the Chancellor's Office.

But I hold office hours in my Chancellor's Office, and I think the students do very well.

Erickson: And how about your research. Have you been able to continue?

Orbach: I continue. I have a National Science Foundation grant which I still have, (which is up for renewal this year), which I have to write my proposal for. I work still in condensed matter physics. My work has tended to bring together theory and experiment.

And right now I have a post doctoral fellow and a graduate student, and a research laboratory in the physics building. And we do low temperature physics research and magnetism, and I work on the properties of disordered magnetic materials.

We just published an important paper. We will publish another one. It's a very exciting time, because this whole field of physics is going through an exciting period.

It followed from my work that I developed in Paris on fractals when I was at ESPCI. And that work has blossomed and opened up what I like to think is a very exciting new field of physics.

I'm still very active. It's hard to find time.

Erickson: And when do you find time?

Orbach: You probably should ask Eva that question.
(laughter)

But on weekends, evenings, and I try to carve out some time during the day. My students and post doc know that if they need to reach me, they're the top priority. They just phone or e-mail, I'll drop everything else I'm doing and meet with them.

Erickson: But that takes even more time, doesn't it, when you have post docs or graduate students working with you, because you have to direct them?

Orbach: Yes, but I'm not there very often, probably three or four times a week at most. And so they have to be pretty independent. I'm not like the normal faculty member who every day is in the laboratory, working with the students. On the other hand, there is e-mail.

Erickson: Sure.

Orbach: There are faxes. We communicate in many different ways.

Erickson: Now how about your interaction with other Chancellors. How do you meet with other Chancellors?

Orbach: Well, we meet at least twice a month, if not more. The Chancellors form a "Council of Chancellors" which meets with the President of the University the first Wednesday of each month. It's called COC, Council of Chancellors. And we have the most important session, which is Chancellors Only, and the President and two other Vice Presidents meet for two hours talking about the very sensitive issues facing the University.

Erickson: Facing the whole University? Do you bring Riverside problems to it?

Orbach: Oh, absolutely, and the other Chancellors bring their problems. We try to address them as a group of colleagues, and we do. I think there is a cooperative spirit, but of course there is also a competitive spirit.

Erickson: Well, talk about that competition a little bit. Is it really competitive among the other campuses?

Orbach: Oh yes, absolutely. At times, one Chancellor or another will complain about another Chancellor's actions or activities that appear to injure his or her campus. But remarkably they are still a group of colleagues. We're colleagues who complain about one another, to each other's faces, but we learn from each other as well.

I learned an enormous amount from the COC during those first few years when I was just getting my feet wet. You had people like Chuck Young or a Chang Lin Tien, really fine Chancellors who had been around for a while, knew what they were doing.

And it was interesting, both in terms of the academic program, but also in terms of the political and the political side of it and also the fund raising side of it. I learned a great deal from them. I still learn, still learn from one another.

But it is clear what campus you're Chancellor of. Everybody knows I am the Riverside Chancellor.

And I know who each of the other Chancellors are. Our primary responsibility is to our campus, but also to keep the system together. And all of the years that I have been Chancellor, (this is the beginning of my seventh year) I've not met a Chancellor that has tried to take the system apart. All of us have recognized the importance of the system, even the new Chancellors from outside the system who come in.

For example Berdahl and Carnesale didn't know the UC system, and they have their own problems on their own

Orbach: campuses. But they also recognized the integrity of the University. It's a very special place. I think all of us are here because we feel that way.

Erickson: It is a special place.

Orbach: Then we meet again just before the Regent's meeting. The Regents meet the third Thursday of every month, and the Wednesday evening before, there's a Council of Chancellors' dinner with the President. That's a more informal setting than the COC meeting at the beginning of the month.

But it's a discussion of the issues we're facing and also what's going to be coming up at the Regents' meeting the following two days.

And in addition to that, the number of committees I serve on ... I was fortunate enough to be appointed to the Executive Budget Committee, which I find just fascinating.

Erickson: You mentioned that you inherited a lot of budget difficulties when you first came.

Orbach: Well, the whole University did. In fact, the State of California did. The Executive Budget Committee meets with the President and the Vice President for Budget, Larry Hershman, at least once a month, sometimes more often, depending on the budget cycle. We talk about very important things.

Erickson: Such as?

Orbach: ... Namely the budget. Well, the issue of faculty salaries, the issue of student fees, the issue of making the University run and run well, and it advises the President on policy.

And you learn a lot at these meetings, and there are two other Chancellors ... one other Chancellor and an Executive Vice Chancellor on that committee. So again I meet with another

Orbach: Chancellor in that capacity. Right now it's the Berkeley Chancellor and myself.

That's kind of nice to have the Berkeley campus and the Riverside campus together on this very important committee.

Erickson: It is.

Orbach: So that's now three, at least three meetings each month. And there are others that develop. I'm also on the Senior Management Advisory Committee which advises the President on salaries for senior managers, for Vice Chancellors and Associate Vice Chancellors, and that meets once a month. So I spend probably two days a week on the campus, doing something associated with the system.

Erickson: Would you talk a little about your interaction with the community too? Riverside has always been known as being very supportive. How were you first aware of that?

Orbach: Well, that was also part of the tradition here that attracted me. There was a very close coupling between the community and campus. And I have enjoyed that immensely. I hope that the community feels that the relationship has been helpful to them.

Without the community, we would have not been able to do the things that we have accomplished. University Village is a three-way affair between the private sector, the City of Riverside through the Redevelopment Agency and also the Council and the campus.

There are so many other initiatives that were done between the school system and the University and the city. The Eastside Collaborative is another example. It's also the attitude toward the University of the city that is so important. It's a very supportive one.

Orbach: I think when we say community, I don't think we should confuse that with the city of Riverside. We are looked upon favorably

by both counties, by the County of San Bernardino and Riverside. We are the only UC campus in both counties. UC means something. It means the quality of education and research at the very highest level, the finest university in the world.

And as a consequence to have a campus, an extension of that, means a great deal. Just in strictly economic terms, I gave a talk to Good Morning Riverside a couple of months ago, and Michael Beck had done a calculation which showed that each 100 students generates \$800,000 a year of income to the community.

Erickson: That's something.

Orbach: That's huge.

Erickson: I'll say.

Orbach: And so that means if we grow by 1,000 students, which we have just done, we will instill into the area \$8 million. That's a pretty good-sized business. We have a turnover now of a quarter of a billion dollars a year.

We are about a \$250,000,000 a year operation. And when we expand to 15,000 students, as we will by 2005, that means probably about \$400 million that will be spent here, which is four-tenths of a billion dollars, and must be the largest expenditure of funds locally of any institution.

Erickson: Oh, I'm sure.

Orbach: So economically, just in terms of our contribution monetarily, we are a very important element of the community. But we have gone beyond that I believe, and the campus is working with the community to improve the quality of life. By that I

Orbach: mean the quality of jobs, the quality of instruction working at every level.

The community, our two counties in particular, have a long way to go before they can start attracting the high tech firms which have made San Diego County, Santa Clara County, very alive and vibrant economically.

One of our problems is that we don't have enough engineers and scientists for start up companies, for example, to employ. And so part of our goal is to quadruple our engineering college to provide the engineers and scientists that the community and local industry needs.

In addition we've been a very powerful academic force in terms of instruction. Since 1990, the UC eligibility rate in our community has increased by 35 percent. I believe that is due in large part to the leadership of the University.

We work with every school system that is interested at all in working with us. CERC, our School of Education program, touches every school district in the Inland Empire, with perhaps a few exceptions.

And our own campus has very close ties to the Riverside Unified, Alvord School District, and now we are going out to the other school districts around the community and talking to them about UC eligibility, about offering the courses that the students should have an opportunity to take.

Our interactions with the Colton School District have been very positive, but also Palm Springs, Palm Desert, Indio, Victor Valley, Hesperia. You can name other areas, Temecula, Murrieta.

Erickson: Right.

Orbach: As you look around the entire area, our campus plays a real leadership role.

Erickson: An a wide area too.

Orbach: It's a wide area.

Erickson: And you go out to a number of those schools, too.

Orbach: Yes, I go out to all of them. I've been out to Falbrook personally. The areas I mentioned are all ones that I went out to. We have a team that goes out, myself and the group under Vice Chancellor Myers, of people who are familiar with the admissions process, the financial aid process, with the student life process. We all go out together and try to encourage the high schools to offer the courses and the students to take them and become UC eligible.

Erickson: Well, let's switch now to Division I athletics. That's quite a jump.

Orbach: Okay.

Erickson: It's taken a long time to get that passed. But it has been passed now, right?

Orbach: Well, the students have voted the fees necessary for us to make the move to Division I. It actually didn't take a long time.

Erickson: Oh, it didn't?

Orbach: The campus had flirted with Division I. And previous administrations had talked about it. But nobody had really put it to the students.

This year, the past academic year, we were very fortunate to have a student body president, Alonso Diaz, who made as part of his platform in running for office the move to Division I.

Orbach: And it was on the basis of fun. Students wanted to have a good time, and intercollegiate athletics was something they enjoyed. And so he made it a point of his presidency to move for a referendum on moving to Division I.

The thought of rivalries with Irvine and Long Beach, Fullerton and Santa Barbara would just be a lot of fun. And the quality of play would be better than we experience now.

Furthermore, the institutions that we would be playing against would look more like us, than typical Division II institutions. So it made sense in terms of the academic institutions

It also made sense in terms of the quality of the athletic programs. Having said that, we're certainly ready to go, but we don't want to make the transition to Division I—we can't really, unless we're part of a conference.

So right now, we've applied to the Big West Conference which contains those schools I mentioned and others. And we have to wait until the presidents and athletic directors get together in the fall and decide whether to admit UC Riverside to Division I status within their conference.

If we're invited, I will immediately declare for Division I which is not taken into account officially by the NCAA until next June 1, where upon we still have two years of preparation to get into Division I, so that we will not be able to play a conference game officially until 2001. So it is a long time, you're quite right.

Erickson: It is a long time.

Orbach: But the process was successful the first time around. This was the first referendum for student fees to support the move, and it passed, and it passed overwhelmingly, with a very large turn

Orbach: out by the student body. So it's just a wonderful expression of student interest.

Erickson: What do you say then to the nay sayers, some of the faculty who are not advocates of that.

Orbach: Well, there are people who have legitimate fear, not just faculty, but students themselves. It wasn't a unanimous vote. There were those who opposed it among the student body.

I don't know what to say, for I find that the fears are not realistic. I don't see us becoming an institution that suborns its academic programs to athletics. We just won't do that.

First of all, I don't want to do that. And the faculty won't let it happen, and the students don't want it. So that just isn't in my view a fear, realistic fear.

There, of course, are realistic people who look around the country and see the troubles that institutions have had with intercollegiate athletics, but they don't always refer to the schools that have done so well—Princeton, Stanford, UCLA—these are not institutions that have been hurt by intercollegiate athletics, quite the contrary.

I don't think that anyone would argue that the Princeton or Stanford academic programs have suffered because of Division I play. In fact, just the opposite—it gets the school out, it gets its name out, people recognize it, and the quality of athletics it thinks is important to the over all quality of the institution.

And we certainly have enough safeguards with regard to recruitment, student recruitment, that we will always have students who are able to graduate from UC. That's a sine qua non, that's a requirement that cannot be waived.

Orbach: We must, if we are going to recruit students for Division I, find students, student athletes, who can in fact profit from their educational experiences at Riverside and graduate, hopefully in four years. That's the criteria that we'll use.

Erickson: And would you give your thoughts, just generally on professional schools, which ones that you would like to see.

Orbach: Professional schools are the way the University can truly couple to the community, the question you raised before. This area has only one UC campus. And professional schools play a very

important role to bring the highest level of sophistication to their area.

Our education school is superb. We turn out more credentialed students than any other UC education school, period—even though we are the smallest.

When it comes to engineering, we've already spoken about the need for engineers and top quality research.

I haven't even mentioned the research contributions we've made to air pollution, water, and we've really contributed heavily in those areas.

You look at management. We need a top quality management school in the Inland Empire. Management is just as important as technology, and it is incumbent on us to work with the business community. Now those are the three professional schools that we already have.

We also have a two-year medical school, but it doesn't have that title. It's a biomedical sciences program. But in fact, it's the first two years of medical school, after three years of pre med. The biomedical science program attracts to the campus the very best students. These are students with 1400 SAT scores, 3.85 or 4.2 grade point averages. They're really superb.

Orbach: But it's two years, and it's designated a program. The first thing we need to do is to create a two-year medical school, so we can compete for the resources that other medical schools can compete for.

Ultimately, I would like for it to be a four-year medical school. The last two years of medical school are primarily clerkships. And what we're doing is to encourage UCLA to work with the hospitals in our area to provide clerks in the third and fourth year. And ultimately we would like to work with UCLA to form a four-year medical school here.

Another area that is very important for our community is the area of legal studies. We will have a Federal District Court with two sitting Federal Judges. We have already a State Appeals Court in Riverside. We have a Family Law Court. We have a Superior and Municipal Court.

Erickson: We have a Bankruptcy Court, too.

Orbach: We have a Bankruptcy Court, a Federal Bankruptcy Court. And they are all in a single region around downtown Riverside. And I think the movement now, and I think we are seeing that happen, of very fine law firms to the Inland Empire, the need to set a standard for the legal education in our community. It would make a law school very important for us.

So my second professional school that I would like to see established would be a school of law in downtown Riverside associated with the legal community here, both in terms of adjunct faculty and in terms of support, in terms of a library, coupling with the Micelli Law Library. It fits and makes sense.

After that, the campus, because those two haven't occurred yet, the campus hasn't really discussed what other professional schools it might want to see developed.

But our Long Range Development Plan calls for us to be a campus of 18,000 students by the year 2010. Now at 18,000 students, we ought to have a ring of professional schools around the campus that would serve the needs of the community.

But it can't be isolated schools, having little to do with the academic core. And so the two areas that I thought about which may not be the ones that we ultimately come up with, but one would be a professional school in the area of family studies.

We have a superb family studies program in psychology, in sociology, in education—quite a broad spectrum of participation among the faculty. I would like to see that developed into a professional school. I don't know if you would call it a clinical

program or a research program, but it would be a program that deals with major problems that face the community in the broad area of family studies: child abuse, the family and so on.

Another area of concentration that we are already very strong in is environmental science. And I would like to see an graduate professional school of environmental science that would deal with the issues facing this community.

I don't have to mention the Endangered Species Act as something that is driving everybody crazy.

But there are many other issues as well, land fills that the County is involved in. There are examples of plumes, bio remediation where the campus is involved.

I think we should do the basic science that would underpin public policy in the environmental area. And so I don't envision this as a professional school focused on policy, but rather a science-based professional school that would inform policy makers in terms of their decisions they have to make.

Orbach: So I see those four certainly in the near future as possibilities for the campus. Each of them will have to be approved by the Regents. And each of them must be tied to the academic program of the core program and not be isolated as an independent entity out there. That's the trick. That's where we are right now.

Erickson: That's the trick. Well, when you hand over the reigns to a new chancellor, what would you say would be his or her biggest challenge that would face them?

Orbach: I would say the original challenge that I saw when I came here and that the campus has always experienced. When the transition takes place, we will be a campus of 13-14,000 students, on our way to 18. That's the size of Irvine, San Diego. It's a good-sized campus—Santa Barbara. Can we maintain the commitment to the student that we have now at that size, the

quality of instruction, while at the same time making sure that our research enterprise is top notch?

I would think that would be the hardest challenge that the new Chancellor would have to face. It's not a challenge that we take very lightly even now. We work very hard at it. I hope we're successful. But I think that's what is special about the campus. I think that's why students want to come here.

There are three "bullets" that I use to describe the attractiveness of the campus. The first is that we care about students. We care very much. We try to be the campus with the personal touch.

The second is the quality of the academic program and the research program.

And the third is it's just a great place to be, it's a place to have a lot of fun. And those are the three descriptive elements.

Orbach: To carry that on with a campus of 18,000 students may be a good trick.

Erickson: That's the challenge.

Orbach: And I'm not so sure the other campuses have been successful in that. They may have. But that I would find would be the most difficult challenge.

I think the state of California so far has been very good to the University. Even in the deepest budgetary period that the state has known since the Depression, the University didn't go under. We were given enough support to get through. We had to muddle through, but we got through.

And now the Governor and the Legislature in the recent budget have given us at least a 16 percent increase in budget. That's unheard of for a research ... for any university. So we've been well treated.

My belief is that we will continue to be well treated, that the economy of the state of California is robust and will continue into the foreseeable future.

So the question will arise, “How do you balance all of these—I don’t think they’re conflicting—but they could be viewed as conflicting forces. That’s what will face the new Chancellor.

Erickson: I see. Would you talk a little about your management style? How do you interact with your vice chancellors, or do you have discussions with them?

Orbach: I hope so. I don’t know if I have a management style. We have a wonderful set of vice chancellors. It’s very important to have the very finest people around you. We work very hard to attract the very best. I think our management team that we put together is the best in the system by far.

Erickson: And did you put that together?

Orbach: Well, part of it I inherited, part of it I put together. Jim Erickson was here when I came. I think Jim has been a fantastic vice chancellor, is a fantastic vice chancellor. He’s the best in the system. He sets a standard for the entire University. He also maintains a set of core values that are critical to the campus and its growth, and its integrity. He was here when I came.

And he assembled with him, Kyle Hoffman, whose absolutely wonderful—we almost lost him—In alumni; Robert Nava in governmental affairs; Jack Chappell in communications. There’s always a fourth one that I forget.

Erickson: I know, I was trying to think of that, too—development.

Orbach: Development, the most successful development program of any university in the country, public university with 12,000 students or under.

We have a new Associate Vice Chancellor for Development, and we'll be looking for a permanent person in that position. But these are all things that Jim has been a part of. The reason I forgot development is that I associate Jim with development. And he has been in every one of the capacities a real leader.

Gretchen is the finest budget person—Gretchen Bolar—in the system, without question. In fact, she spends a great deal of her time in Oakland assisting the President's Office in budget and planning. She's absolutely fabulous.

I think David Warren, if he isn't the best Executive Vice Chancellor, I don't know of another one who's better. And he has just worked so hard and is so effective, especially in quality appointments and promotions and handling the business side of the campus in terms of the academic program. He is absolutely superb.

Orbach: Our Vice Chancellor for Administration is the best in the system, without question. It is Michael Webster. When you start going through the people who populate—

Our Vice Chancellor for Student Affairs, Carmel Myers. I don't know anybody better than she.

You are talking about the very best people. Now some may argue that there may be somebody equivalent elsewhere in the system. But when you put that kind of team together, that's about as good as it gets.

Erickson: And do you meet as a group and discuss the campus?

Orbach: We meet each week. We meet a lot, but not face to face, on e-mail.

Erickson: Oh, sure.

Orbach: A lot of electronic mail goes back and forth. But we meet formally every week, every Monday morning. I call it G-8

which means Gang of Eight. And so it is the individuals I've mentioned, plus others.

Harry Green, who is our Vice Chancellor for Research and doing a wonderful job.

Then after that we have a Coffee Hour which was always meant to be an informal gathering. It's now become a leadership meeting for the campus.

Our Deans are superb. They're at the Coffee Hour. I try to delegate as much as I can. I try to get the Resources out of the Chancellor's Office in to the hands of the Deans and then in to the faculty.

Orbach: I try to have the Vice Chancellors independent doing their thing. If I hire them, and they're very good, they ought to have the ability to do what they want to do.

And every so often I'll interfere with what they want to do, but that's the cost of having a Chancellor. (smile)
No, I try to delegate as much as I possibly can.

Erickson: I would like you to describe a typical day, if you would, in your life as a Chancellor.

Orbach: Well, if I start in the morning, up at 6:00. I try not to get up before 6:00, because I get so sleepy later on in the day.

Erickson: Sure.

Orbach: I usually will have either tennis with Eva, or I'll have a 7:00 or 7:30 a.m. meeting where we'll talk about, for example, community matters or the Monday Morning Group, community matters with the Action Group in San Bernardino County.

I will then come to the office and will have meetings with a vice chancellor or with other administrators, with deans, if there are particular issues that come up.

I also meet with the Student Body President on a regular basis, and the Graduate Student Body President on a regular basis, at least every two weeks, where we talk about issues they're interested in. I try to be as helpful as I can to both organizations.

I will quite often meet with students—students from high school, students from universities, students that I have met at social occasions, students whose parents I have met—to talk about the University and their going on to college and what they should be thinking about in their career and how best they can follow their career choices. I enjoy that very much.

Orbach: I meet with all of the Alumni Scholars. Each year the Alumni Association designates 20 or 30 scholars. Tomorrow I'm meeting with one, just a half hour, but I get to know this remarkable group of students. I talk with them about what their plans are.

Quite often they don't realize how good they are, how strong they are, and I will try to encourage them to look into research opportunities. Many of them are from families who have never gone to college before. And so I'll talk to them about opportunities to do things in a professional area that they may never have thought about, and then point them in a particular direction.

I then meet with my own staff in the Chancellor's Office. I meet with my research group. I go to meetings, as I said, at least two days a week off campus, but also community meetings.

We'll meet with, for example, the Inland Empire Economic Partnership, or Core 21, programs that are focused on economic development of the area.

I'll meet with Councilmen. I'll meet with Supervisors of both counties. I'll meet with Congressmen. I'll meet with State Senators. I'll meet with State Assemblymen as the occasion dictates.

It's a wonderful job because it's such a cross section of individuals that make up one's day.

Erickson: Such a variety.

Orbach: And every day is different.

Erickson: Sure.

Orbach: I also then will come home, typically at 6:30 or 7:00 p.m. I have a chance to say hello to Eva and then get on e-mail which typically takes me from 8:00 in the evening until 10:00. And then I'll start writing and reading. So it's a long day by the time I get to sleep.

Erickson: A very long day, and then you have dinners most night, too.

Orbach: Oh, the dinners are from 7:00 to 8:00 p.m. usually.
(laughter)
And then there are social dinners associated with development.

Erickson: That's what I meant.

Orbach: And other community affairs will take up the evening.

Erickson: Well, to keep up with you, your office has to be very organized, doesn't it. How do you like it to run? I guess what I am getting at is how do they prepare you for all of these meetings?

Orbach: Well, each evening I have a set of folders which contain each meeting that I will have the following day with the background material in the folder. And then I review that in the evening or in the morning when I get up.

They're on top of everything, because they have to make sure that the schedule works, so that I'm not here one minute, and have to be there another minute, but they also have to have the

background material and anticipate the materials I'll need for the various meetings.

They work very hard. And then also they have the Regents' agenda that they're responsible for, the Senior Management Advisory Committee that they're responsible for. So my office is quite occupied.

Erickson: I'll say. Is there anything that you would like to bring up that we didn't talk about?

Orbach: Well, I think the overall role of the campus, the significance of the institution, the visibility and the impact that UC Riverside has—we haven't really talked about that from a national and international perspective.

But I look at the campus as a major force in higher education. I look at it as a leader in terms of research and teaching, in terms of diversity.

I think its responsibility to the community is extraordinary. I think it stands out for its accomplishments.

I look at UC Riverside as something of a beacon to students and faculty, as saying this is where it's at, this is where the action is.

We look like the future of California. Our student body is almost representative of the ethnic diversity of the state. They're hungry. They work hard. They're serious. They have a good time. But they want to be leaders. They want to be the future intellectual, social, emotional leadership of the state and the country.

So our responsibility is to try and get that to happen. We try to provide the atmosphere and the equipment and the support that's necessary for these very special students to take on their roles of leadership. I see our campus as taking its place amongst the very finest academic institutions anywhere.

And I think that's something we can all aspire to. We have a ways to go, but we're getting there. And the campus, as I like to say, is "making a lot of noise."

Orbach: People now are beginning to recognize its qualities, the same type of qualities that were there in 1992 when I first became acquainted with it, but to develop them and empower them and make them effective at the nationwide level. And that way, the best students will come, the resources will come, the faculty will come, and it will build on its self.

There's no single action that we take that accomplishes this end. It's a layered structure. It's a series of actions. You mentioned Division I. That's one of the things—to make our campus fun and to give it recognition, and to bring quality to our extra curricular activities.

And then, of course, there's teaching, research and the quality of our students and their contributions when they graduate. All of these things add together and give the campus a presence on an international scale. That is so important for our future, and I think for our mission.

So that's a capsule of what's so special about this institution and what I hope for it.

Erickson: It's wonderful. It's a great place to be, isn't it?

Orbach: Yes.

Erickson: Thank you very much for this interview. It's been very interesting and enlightening.

Orbach. Well, thank you. And may I say, Jan, thank you so much for doing this. I don't know if this will be on tape or not, but your spending the time and effort and organization to put these programs together is terribly important because it forms a record.

But your service to the campus, and also through the statewide program that you've been a part of this year, the Council, you have been absolutely wonderful, and we've been delighted to have you with us.

Erickson: Thank you. It's been my pleasure.

Orbach: Great.

END OF INTERVIEW

Text in *italics* has been edited by Chancellor Orbach.