Tape 1, interview with Dr. Donald Sawyer, Dean of the College of Physical Science, March 16, 1971, Jody Swartzbaum, interviewer.

_J:_ I wonder if you can tell me the circumstances surrounding your employment at UCR.

_S:_ Well, when I was a graduate student at UCLA, finishing in the spring of 1956, Professor Pitts of UCR contacted Professor "Pecksock" who was one of my research directors at UCLA seeking possible candidates in the field of Analytical Chemistry, which is my field. And as a result, I became aware that UCR was seeking somebody in that area and I contacted Professor Pitts, as I recall, by telephone and was invited to visit the campus and on a basis of that interview, and I think I gave an informal research seminar, I was then asked to fill out the biography and biographical forms and then other letters and negotiations were carried out and ultimately I was offered a position as an Instructor. It was the pattern then that beginning people were hired as instructors. As I recall, in fact I recall it quite accurately (of course the campus at that time was not individual departments, but divisions which had the status of departments and so there was a division of physical sciences. And, the division at that time did not have a whole provision available for the chemistry program, they had half a provision and the mathematics department had another half). And so my initial contract called for me to teach half time in mathematics and half in chemistry, which was something I didn’t feel terribly qualified to do in terms of the mathematics. In any case, by the time I arrived on campus in September--

_J:_ which year is this?

_S:_ 1956, Professor Pierce who was chairman of the division had somehow found, via the chancellor, another half position, so I didn’t have to teach mathematics but only chemistry when I became appointed.
J: I see. What was your impression of UCR when you first came?

S: Well, I'm sure mine was not typical because I was raised in Riverside. As a youngster, I went through two years of Chemawa Junior High and then my family moved out into the rural part of the county to a ranch near the town of San Jacinto and I went to high school for four years at San Jacinto and so my whole youth was associated with Riverside and its environs so I knew a great deal about the town and the people, and the community and the, if you will, the rural traditions and political aspects of the community. So I would say my impressions were no different than they had been for a long time.

J: What about the chemistry, well the physical science division itself, as it compared to the one you had been working at, for example.

S: Well, coming from UCLA of course at that time, I believe the enrollment at UCLA was approaching 17,000, although that's an impression. It was just short of 15,000 when I went to UCLA in 1949 as a freshman and when I left it had grown. As I recall it must have been close to 17,000 students and so going from that kind of very cosmopolitan, diverse intellectual community of a major campus, to Riverside which in the fall of '56 as I remember, had 710 students. That turned out to be in the impressions of people a kind of a disaster, because I believe that the fall of '55 the enrollment was about 700, so it had been static one year and that it upset people a great deal. And, so there was this very dramatic change in size and of course, the chemistry department at UCLA at that time had about 25 faculty members, and we came to Riverside and I believe there were 5 faculty in chemistry so that the whole division was very much like a department, and there was close interaction between the mathematicians and the chemists and the physicists and the geologists. So it was a very close group and we tended in our social lives to meet together as a group and there was not much class distinction then. I mean, instructors had as much say on policy as full professors and the only full professor in the division at that time was Professor Pierce.
J: I see

S: The only other tenured faculty member at that time was Professor Pitts. He was an Associate Professor. And the rest of the faculty were either Assistant Professors or Instructors.

J: What was your impression of the physical plant at the time as far as chemistry was concerned? Did you feel you could feel could do research. Was it adequate for your research purposes?

S: The facilities in chemistry were very meager at the time. Ah, the laboratories had the requisite utilities and so forth, but in terms of instrumentation, the campus was very deficient relative to a place like UCLA. The campus as a whole, just prior to my arrival, had pooled its resources to buy the first infrared spectrophotometer and this was for the entire campus, and it was a monumental effort. Whereas, other chemistry departments, particularly graduate chemistry departments, had extensive facilities. It was just the beginning of the kind of whole changeover of chemistry, where instrumentation became essential to do research and so at the time, it was difficult to become competitive because we didn’t have the resources that graduate departments had.

J: When you were hired, did you get the impression that more emphasis would be put on teaching, your teaching ability, than your research, as far as promotion is concerned? Or, was this a myth?

S: Well, I—at that time when you were hired onto the faculty at UCR, you met most of the faculty on campus and certainly the impressions you gained were different, depending on area. From the very beginning, the physical science faculty and the students there realized that undergraduate training or any other level of training in the sciences is really an experience in the sense that you need to be in the laboratory and to discover things. That good laboratory experiments for freshmen should be a discovery process and many of them turn out not to be that but that’s what you would like. So, at the very
nature of the physical sciences is one of discovery and so research, which is time consuming and difficult, was an integral part of the undergraduate instructional program and it's very hard to draw boundaries between undergraduate research participation and graduate research participation or just research as an independent scholar. So, there was no kind of distinction that you will come to Riverside as a chemist and teach but not do research. So from the time I arrived I had the impression that the criteria for advancement was a combination of teaching and research and I'm sure I would not have come, now would have any of the other members in the chemistry end, and in most of the other departments in the physical sciences, I think they would not have come had there been a feeling that the research was not important or not allowed. So I think, of course I came in '56 which was 2 years after, but I was really the first appointment after the initial block of faculty in chemistry.

**J:** How would you compare the students you taught at UCR with those you know at UCLA? Did you teach at UCLA?

**S:** I was a teaching assistant at UCLA for two and a half of the three years I was a graduate student. I had occasion to give lectures in the absence of the instructor when he was out of town in a number of courses and also I was in charge of developing a new laboratory in instrumental methods which was being taught for the first time, and so as a result of this I had a very heavy interaction with undergraduate students there and so the comparison between the undergraduate chemistry majors at UCLA and Riverside was quite directly possible—was possible in a direct way. The UCLA chemistry department at that time and continues on to today to be a very good department in all aspects, both undergraduate and graduate. And so UCLA did not suffer in the comparison in 1956. They had a very strong undergraduate instructional program, the faculty worked hard at it, and I had a feeling that the quality of students was of a level commensurate with what I experienced when I came to Riverside. The real difference was that it was the exception that undergraduates participated in research, whereas at Riverside it was universal. Virtually every undergraduate major in the physical sciences participated with a faculty member in research before he graduated and that was the dramatic difference.
That’s what made the difference that kind of B+ students from UCR and they would have been B or B+ students from UCLA, would go on to graduate school and perform as A students because of this undergraduate research participation. Whereas, the UCLA student might not even go on to graduate school because he hadn’t had the personal interaction of a faculty member and he was somewhat beat down. We probably graded just as hard here and the students probably did feel somewhat beat down, but they were resuscitated by the informal interaction of undergraduate research and they were told that they could go to graduate school and be successful, so they were reassured. Whereas at UCLA, the very size precluded this kind of thing and so I had many friends who were B+ students who decided not to go to graduate school, whereas at UCR, that same caliber of student almost always went to graduate school. Something like 75% of all of our graduates went on to graduate school.

J: I wonder if you can give me your impressions of Conway Pierce as an administrator.

What was he like to work for?

S: Oh! Well, let’s see. Professor Pierce is a unique human being. I think anybody that really got to know him would agree with that observation. I came in contact with him in several, what I consider to be, fascinating ways at an early stage. Although he is a very warm human being, when you first make his acquaintance, at least from my own experience, it was one of ‘here is a man who is definitely in charge’ and knows where he is going and you cannot help but give him the respect his position deserved, even though he never demanded this, in fact he was very prone to operate with subordinates in an extremely informal, nonstructured way. In spite of this, they respected him and treated him as the senior administrator, and so forth. So that he engendered respect without demanding it. But that was an aside but it was one of the things that impressed me. He always wanted people to be on a first name basis but people always referred to him as Professor Pierce. The other thing that brought me in close contact with Conway Pierce was that when I arrived here in the fall of ’56, I was asked to teach two courses: one of them was my area of specialization —Instrumental Methods, and so I had to redo a course that had been started prior to my arrival and a quite different format than I thought was
desirable—so I was restructuring that at the same time because the campus had very limited large lecture halls. It was necessary to offer Chemistry 1A twice during a given term and Professor Pierce had, up to that time, been teaching that course and so in the fall of '56 it was necessary to split the course into two sections. Since he was acting as chairman he didn’t have time to offer both of them and so I was asked as my baptism to academic fire to teach the other section. They were scheduled such that most of the nonphysical science majors took the section that Professor Pierce offered in the afternoon. So, there were many Life Science majors and a number of nonscience students taking that one. Whereas, I was offering the course in the morning and almost all of the enrollment were majors in the sciences. I had just gotten out of graduate school and I felt that science was a rigorous, demanding discipline, chemistry in particular, and that one should not be too easy on students because it would only postpone the inevitable day when they would have to face up to whether they had the ability and the motivation to work hard enough. So that I offered a very demanding course as my first experience because that’s what I remembered in my own experience as an undergraduate at UCLA. Well, Professor Pierce being a much more experienced, seasoned veteran of the University of Chicago and Pomona College, prior to UCR, and had, you know, a lot better perspective of what you could expect and this was coupled with having an enrollment in his class that were not gung-ho science majors, by and large. And so, he talked with me a number of times about whether I wasn’t pushing my students. He never questioned what material and he never questioned or asked to see any of the exams I wrote, but he did comment at times afterwards that I was expecting too much and I appreciated his comments but disagreed with him. I probably have changed in my viewpoint more than he has over the years; although I think one has to teach a course the way he feels he can best accomplish it and I’m not sure that there is one right way for a given course. My exam averages would hang around 50%, whereas Professor Pierce’s would hang around 70%. A 70% on Professor Pierce’s exam would be a C, and a 50% on mine would be a C so it didn’t really make that much difference. But, it was quite an introduction to teaching to have the most senior faculty member on a parallel track with you and so it did keep one on his toes. The third dimension of Conway Pierce that I came into association with was that he and Professor Hanish at Wabash College were
coauthors of the most successful text in the United States, known as *Quantitative Analysis*, and this book had enjoyed immense success as a text for the sophomore course which is required of premeds, prents, chemistry majors and many life science majors. And, it was in its third edition at the time I arrived at UCR and since analytical chemistry, at that time, was thought of as being somewhat directly associated with the subject of quantitative analysis, Professor Pierce approached me I think in January or February of 1957 and asked whether I would be interested in participating in the revision of his textbook. And, this was an extremely high compliment from my viewpoint, because here I was still a first year instructor and this book was so very successful that being associated with it was very valuable in my mind, professionally, and would help me as a faculty member to get the experience of participating in a revision. And so I enthusiastically agreed and so we spent the next year, a little over a year, working together quite closely on the revision of this and then Professor Hanish participated in a kind of final editing. But it was really Professor Pierce and I that did most of the writing on this revision. And so again I had the opportunity to see Conway Pierce closer that would have been possible if it hadn’t been for this kind of professional collaboration. But you asked about Conway Pierce the campus administrator and again, besides being a somewhat unique human being, he probably had a fairly unique approach to administration.

Much of this may be folk tale, but I suspect it’s not too far from the substantive situation. Professor Pierce was a person who people enjoyed talking to. He enjoyed a coffee cup conversation and he was famous for his coffee, not only in terms of the consumption but in terms of preparation. And so I think he did most of his administrative business informally over a cup of coffee. He was not a prolific producer of correspondence. He produced written correspondence when it was essential but I think if he could avoid it he would. And so, he often negotiated administrative changes or commitments orally, and over a cup of coffee. Because he was one of the original (I guess it’s five) people that started UCR as an undergraduate institution, he had a very close personal association with the other four people and they looked upon themselves as a kind of a ‘gentlemen’s club’ you might say. Not in any restrictive sense, but they worked so closely together in the formative days of UCR that they were close personal
friends and they entertained each other and their families on a social basis. And so, it was really much more of a kind of a friendly committee than it was any kind of structured thing. Probably, Provost Watkins, as he was known those first two years, three years actually, was looked up to and so forth, but the other four, I think, were on a kind of very equal basis and so this continued on as the campus grew and became somewhat more structured and more formal. Conway always felt that he could go have a cup of coffee with Chancellor Spieth, simply because they had been division chairman as coequals. Folk tales have always indicated that Conway Pierce probably had considerable influence on the selection of Chancellor Spieth, but I have no direct evidence, only hearsay on that. I am sure Conway talked about this—of course this all occurred just prior to my arrival. I arrived in September of '56 and the announcement of the Chancellor was almost coincidental with the time of my arrival at the campus so that I only heard it after the fact as to the decision and there were lots of other folk tales about the jockeying for getting the right candidate and getting him accepted as a candidate for the chancellorship with the retirement of Provost Watkins. I wasn't a participant, I am sure there would be others on campus who were here at the time who could give more accurate folk tales about that, so it's probably not useful for me to repeat them since somebody will give them first hand I assume.

J: What was your impression of the members of the Humanities Department? Did you have much contact with the Humanities Department personally?

S: Some, I think I found a number of interesting people, interesting in the sense they were fun to talk to, stimulating to talk to. They were obviously academic intellectuals. They worried about a broad spectrum of things. In fact, I think on average, in a social sense, I had more interesting associations with selected individuals of the humanities, than I did in my own area. But I think that's largely my own personality and interests. I think I have a fairly broad range of interests beyond just the sciences and so I think both I and my wife sought outside associations that would not be the same as the work association, although we got along well with the people in the division of physical sciences. And so, over the years, and that continues to this day, we developed a number
of quite close associations with faculty in social sciences and the humanities. In terms of, if you will, work associations, or if you will, campus involved associations with humanities, as I recall my baptism of fire there was at an Academic Senate meeting in which I was a young, brash faculty member from a very sophisticated, cosmopolitan campus and at times I'm sure I had a feeling that UCR was kind of out in the bush leagues and didn't know how things really were in the outside world. That was extremely naïve and inaccurate on my part but I'm sure I had that type of feeling and so as I recall at either the first or second Academic Senate meeting I went to, at which time I was not allowed to vote since I was an instructor, but I could speak, and as I recall I was so impertinent as to take the floor and speak on some issue which I can't recall, but it seemed important to me and seemed that the provincial citizenry of UCR should be set right on how it really is and as I recall, Professor Marshall van Deusen, at that time a very vigorous debater and his very pointed remarks cut me down to the proper size and so that was my first introduction to representatives from the Division of Humanities, you might say, in which I learned a lot about debate very quickly.

J: Let me ask—what did you think of the Humanities course requirements. How were they affecting your students? Were there more than at UCLA to start with?

S: Well, the UCLA pattern was not greatly different from the Berkeley pattern. There were certain breadth requirements, usually satisfied by a fairly narrow selection of introductory level courses. But there was some choice and in addition, chemistry at UCLA just as chemistry at Berkeley, had found it necessary to be excused somewhat from the full setup in order to professionally get the student to level where he could compete when he left. And so the breadth requirements or the amount of nonscience, nonmathematical material required at UCR I think was more than it was at UCLA but not substantially more. It was just that it was a specific course and that was not true at UCLA. I would say at the time I arrived, I had no direct impression pro or con about the Western Civilization Course. Later on I had occasion to look at it in some depth but at that time the only impression one got was from student comments. The student comments were certainly variable and depended a great deal on the instructor and on the
student. Some students, particularly the freshman year, really wanted nothing other than science and mathematics and anything other than that, they were going to find unsatisfactory, no matter who was teaching and how well it was taught. In fact, this impression became so common that I, in my advising whenever possible, urged students to postpone taking Western Civilization until they were upper division students. I found the students were much more satisfied, and from comments from the faculty in the humanities area, they found these students more interesting students and better students at that time. I think by then the students had their fill of science and were really looking for something to kind of ease the burden. So, I continue to this day to think that for many of our science students that is a better time to take courses in the humanities than the freshman year.

J: All right, I wonder if you can give me an impression of Chancellor Spieth as an administrator—or Provost Spieth?

S: No, he was appointed as the Chancellor, I think he was the first, and then they brought the title Chancellor back to Provost Watkins and made him Chancellor emeritus. But, I believe the change, as I recall, my recollection may be a year off, I thought that Chancellor Spieth was appointed as the Chancellor but it might have been afterwards, although anyway, my impressions of him. Well, they cover a long period of time, from the time of appointment of course, I didn’t know him, the paperwork on my appointment was handled by Provost Watkins and when I arrive on the scene, there was Chancellor Spieth. So, there was no direct occasion other than the annual reception for new students and new faculty in which one was formally introduced and I believe either Professor Pitts or Professor Pierce took me down to meet Chancellor Spieth shortly after my arrival on campus. As a person, Chancellor Spieth was quite stiff, I think somewhat ill-at-ease with strangers, although I’ve since then come to know him quite well and find him a quite easy person to talk to. But at that time I think that many faculty found it difficult to talk. Another impression which carries over is that Chancellor Spieth was very dedicated to his administrative responsibilities and he worked very hard at them but he didn’t take advantage of his efforts, and therefore suffered as an administrator. One would face him
with a problem and he would hear you out, and more or less give no response and you would assume that he was essentially going to ignore or at least not do anything about the problem, and you felt very dissatisfied, and you might well be critical in informal conversations about the way he was handling them. Lo and behold, maybe three months or six months later, what you requested appeared in which he had given you no feeling that he was going to do his best to solve it; in which if he had done that and had failed you would have said he did the best he could. If he went off on his approach and failed, you never heard anything and you assumed he had never done anything and I think, you know, my assessment is that he lost a lot of support unnecessarily there, that he really did do his very best to get all that the faculty were due and was quite successful on a number of occasions but didn’t get, if you will, the kind of support and loyalty he deserved because he didn’t tell them, he didn’t keep them informed of this. So, that was one impression. I don’t think candor would allow one to say that Chancellor Spieth was a ‘born’ administrator or ‘gifted’ administrator. He had to work at it very hard. He wasn’t a gifted speaker, he wasn’t an outgoing person by nature, and so I think it was pretty hard work for him but he did work at it and he did all the things one has to do as a Chancellor in the best way he could. So, I think his commitment was completely there and I think his effectiveness as Chancellor, particularly in interrelations with the community, was greatly aided by his wife. She worked very hard at developing community interactions and I think she was well regarded by the community, and still is, as a result of these efforts. So that I think in that respect, Chancellor Spieth was greatly assisted. Ahh, there are a lot of specifics of his administration, and it’s hard to know which of these are relevant to this. I guess one of the things, one of the first exercises in learning about administration occurred, I think in 1958, it might have been earlier, but it was no later I think than that and I could check records to be specific but I think that’s not important. Ahm, what had happened is that the campus had an infrared spectrophotometer, and it had a manual UV visible spectrophotometer, a Beckman DU as it was known, but it did not have an automatic recording visible UV spectrophotometer and a number of the chemists were being seriously disadvantaged in their research by the absence of such equipment. And, thus it seemed essential if we were going to be able to carry on the kind of research we were engaged in to acquire such instrumentation.
J: Would you explain what this is used for?

S: The visible and ultraviolet spectrophotometry tells anybody that has been trained, but scientists particularly, about the energetics of the bonding electrons and molecules. All kinds of molecules, but particularly metal ions of the transition series, as well as of aromatic molecules in organic chemistry. And, if one wants to know about the structure and general properties of molecules in modern day chemistry, you really had to have such equipment available. Now a manual instrument, not only did it take many times as much time but actually was not capable of the resolution and the precision to do it. Now the campus had a sort of a recording instrument in the Citrus Experiment Station, but it was tied up for specialized purposes and it turned out not to be a particularly good design for the instrument and it broke down a number of times and so it really was not available and would not have served the purposes needed had it been available. So that I and Professor Pitts and Professor Metcalf and Professor Middleton had gotten together and talked about the need for this and Professor Pitts and I wrote a proposal for the Research Corporation requesting $2,500 towards the purchase of a Carry Model 14 Spectrophotometer which cost approximately $14,000. Now our proposal to the Research Corporation was that if they would give us $2,500 we would try from the rest of the campus to get the balance of the funds. What we had done is we had gotten commitments from Professor Metcalf, who was Chairman of the Entomology Department, and Professor Middleton who was Chairman of the Department of Plant Pathology, and also the first director of the Air Pollution Research Center, such that we had half the cost of this instrument collectively and Professor Pitts and I had talked to the Dean of the College of Letters and Science, Professor Nesbitt, and indicated what we were doing and he had been quite supportive. And, Professor Metcalf and Professor Middleton had talked to Professor Boyce who was Director of the Agricultural Experiment Station and he had been supportive. And so when we had collected the requisite bits and pieces of money, we arranged a meeting of all parties with Chancellor Spieth and this was to get him to agree, from funds we didn’t know where they would come, to come up with the other half. And so, up to this point we had been quite
encouraged by both Director Boyce and Dean Nesbitt and so the fateful day for meeting arrived and we sat down and indicated why we were there, and as I recall, Chancellor Spieth felt that the campus had adequate facilities for its mission at that time and that we should not be wasting either our time or the campuses resources in building up high powered research activities. It wasn’t clear what was bothering Chancellor Spieth at the time, but in any case he clearly demonstrated very early in the conversation that he was not going to be supportive or receptive at all to what was being proposed. Now the surprising thing, or the enlightening thing, was that the other two administrators present tended to concur with the Chancellor’s assessment, which had been quite a shocking setback for the four of us and we left quite disturbed about the whole matter. And it turned out that as we walked away feeling that we had been not entirely well treated in the situation, Professor Middleton and Professor Metcalf indicated that they had some other resources and that they were sufficiently disturbed about it that they felt we ought to move forward on this matter and so within 10 minutes we had arranged the whole $14,000 and proceeded to buy the instrument.

J and S….Laughter…. 

J: It was quite a lesson in administration in which one does not want to anticipate whether he’s going to have support or not, but wait to hear. It told us a great deal about how many bridges you will have to cross before you are assured. I would say that was an indication of the quite conservative approach to being competitive in scientific research that existed at that time on campus. I don’t think it was particularly an exceptional criticism of Chancellor Spieth, it really just was reflective of the temper of the times and that physical sciences at that time were beginning to feel their oats pretty much and I think from the very beginning the physical sciences realized that graduate work was inevitable. Even though at the time of starting UCR and for the first two years, the general campus attitude was that it was going to be something like the Swarthmore of the West. But, I don’t think the physical scientists, other than maybe the very first appointments, had any illusions that that was going to be the ultimate role for the campus, and I certainly, when I came in ’56, I had the impression that it was not going to be solely an undergraduate institution. I don’t know that there was anything very specific talked about but my own impression coming from UCLA was that if we were on the same
salary schedule and the same formal criteria for advancement, that there was no alternative than for us to have the means to compete with actively _____ faculty, that it was clear I was going to be judged as a chemist alongside the instructors and assistant professors at Berkeley and UCLA. As soon as that occurred, I was going to have to have the means to compete. And I think that was true of the sciences more than other areas because the sciences are more professional. They fix standards, they’re much more set by professional societies than they are by any local institution and that’s been true I think for most of this century, in the hard sciences, that the peer group really is a profession much more than the academic community and so that’s why I think all of us realized that we were going to be involved in extensive amounts of research and that to do this in the experimental sciences well would require the presence of graduate students. So that I think there was not much disillusionment in the physical sciences; whereas, there probably was on the rest of the campus and it certainly, no substantial resistance to the introduction of graduate work. And, I might speak to that because history indicates that there were some interesting political gambits associated with that.

As I recall, it was in the spring of ‘58 that the Statewide Educational Policy Committee was discussing future planning in terms of expansion of the University, and so forth, and at the ________at that, there were a number of statewide meetings of the educational policy committee and the Riverside representative at that, the University grapevine indicated to us, had suggested that the vast majority of the faculty at UCR were unalterably opposed to graduate work

J: I’ve read that report in fact.

S: And that, when that word came back to us we were very upset because no one had asked us and we didn’t think it was true and as I recall, I had a morning meeting with Professor Thain McCullough, who was a senior man in Geology and at that time was an Associate Professor and he and I were on good terms and I forget how I became aware that this had been stated, but it seemed to be a good and hard rumor, and so I talked with Professor McCullough and I said, you know I just think that’s not correct, 51% of the student body at that time were natural science majors, our students were well recognized in terms of all the standard criteria, and we felt we represented a substantial fraction of the campus community, and we didn’t believe that the vast majority of our section of it
were unalterably opposed. We suggested that maybe we ought to find out. And so Professor McCullough and I had a meeting with Professor Pierce and outlined our concerns and he allowed as how he thought maybe our suggestion was a good one. And so, several of us, and I forget how many, but no more than half dozen, prepared a petition, which I think has now been destroyed, which is unfortunate. It was in Professor Pierce’s possession for a long time and he had always indicated he would retain it but the last time I checked he couldn’t lay his hands on it. But this petition roughly said “we the undersigned favor the orderly introduction of graduate instruction on the Riverside campus. It was no longer than that –it may have had a different set of words, but basically that was what it said and we collected signatures only from the College of Letters and Science on the basis that we did not want to be accused of loading the deck with the Citrus Experiment Station people who were only really concerned about graduate instruction and so would have been overwhelmingly in favor. We got 55% of the faculty on this campus to sign the petition.

\( J: \) Was that all faculty or just tenured?

\( S: \) No, no. All faculty. No, we made it a point to poll every resident faculty member in the College of Letters and Science and we acquired, as I recall, 55% of the signatures at which point we turned these over to Professor Pierce who we assume made the Chancellor and the local Regent aware of this assessment as a counterfoil to what was being said in the Statewide Educational Policy Committee. Because we were of the opinion that decisions might well be forthcoming that would depend on what the faculty viewpoint really was. The representative, I think the Chairman of the Statewide Educational Policy happened to be a chemist from UCLA at that time and UCLA generally had been very supportive of the Chemistry Program at UCR because in their own history, they had been treated so very poorly by Berkeley when they started graduate work. But at this juncture, we were beginning to possibly come into some competition and as I recall the UCLA representative on educational policy was quite sympathetic to the viewpoint that the faculty were unalterably opposed and so we needed to overcome his sympathy for that, and again that was the reason for the petition. We felt we had to
have a document of evidence that a majority of the faculty were in fact in favor of graduate work. It is unfortunate that we can’t retain, we don’t have a copy of the petition, because it was never given to the Chancellor, it was only communicated verbally as we understand it, by Professor Pierce. He retained the copies because there was an interesting collection of signatures. It was not just the scientists. There were a number of people from the Humanities and the Social Sciences who signed the petition—who were somewhat reluctant, for political reasons to sign it and we had indicated we would try to avoid making it publicly known because some of them were in positions of administrative sensitivity in signing this. I can recall many of them, but again, it probably doesn’t add much to the tale of the history but I think that, I like to think anyway, that that was an important event in the history of UCR, that I am sure we ultimately would have been declared a general campus, but it might have been postponed several years which probably would have caused the rumor that was being circulated six months later, as I recall it was in late 1958, in which Regent Pauley was suggesting that maybe UCR should be turned over to the State college system.

J: I see

S: There is certainly some, I think that rumor probably is accurate, and it might have been had the faculty persisted that they were unalterably opposed—that Regent Pauley’s suggestion might well have been adopted—that’s just conjecture on my part, but I feel that it was the appropriate time and the faculty, the majority of them were ready for it and the facilities were coming along to where we were at least in the sciences ready to initiate work. And of course, in the spring of ’59 the campus was declared a “general campus”. That is always cited in the histories as being the key decision point, but actually the Chemistry Department submitted a proposal for the initiation of graduate work well ahead of that. So, that proposal was before the University committees, well before the Regents made that decision. So that it was not a unilateral sort of thing, there were a collection of forces building—there was the petition, which the President and some of the Regents knew about, that had occurred in ’58. Then, there was, as a result of that petition, the formulation of a proposal for the initiation of graduate work in Chemistry
that was put together after the petition during the summer of '58 and refined during the
fall of '58 and submitted so that this was before the Educational Policy Committee and
the Graduate Council of UCLA, well before the Regents made their declaration of a
general campus, because we were all geared, you see we initiated graduate work in the
fall of 1960.

J: You were the first Department then.

S: Yes, and we weren't even a Department, of course, at that time. We became a
department in the fall of '61 as I recall. I may have my history one year off.

J: I think that's correct.

S: In any case, so we had to start all this program in a very awkward administrative unit,
a division of physical sciences, where we were going to offer a Master's and Ph.D. in
Chemistry. And, the program at that time was administered under the Graduate Division
of UCLA so that we had to everything through the UCLA Graduate Council, which was
very awkward and the Dean of the Graduate Division at UCLA was over an Associate
Dean in Riverside. So, those formative years were very difficult from that standpoint, 
just on the basis of the logistics of moving paperwork back and forth between UCLA and
Riverside.

J: Now, did UCR, you said there was some competition between UCR's Chemistry
Department and UCLA?

S: Well there was this feeling I think at that time by the representative from UCLA who
was a Chemistry, that UCLA had the capacity to train all the graduate students in the
southern part of the state that wanted to go to the University and therefore, why not have
Riverside continue to do its high-quality undergraduate job. Now, whether the
motivation was one of UCR does one thing so well we musn't do anything to jeopardize
that, or whether it was a feeling that let's don't spread the graduate student wealth, is, I
think, up for conjecture. I know the faculty member quite well—I don’t believe I know
what his purpose was. Although I think there was a feeling that UCLA could do things
so much better because of its extensive faculty resources and facilities, that, it really was
counter productive to have another small program being initiated. I think the record
indicates that probably he was wrong in that assessment, that we do train graduate
students in ways that are probably superior and certainly different from the way UCLA
trains graduate students.

J: Could you elaborate on that? In what ways?

S: Well, size is certainly an important factor here. UCLA has about 150 graduate
students in Chemistry and we have somewheres between 60 and 75—so they’re roughly
twice as big, twice as many faculty. And then, graduate training is really introducing and
caus[ing] a student to experience, original research, and we do different research here than
UCLA. Specifically, each professor’s research is at the frontier and the frontier is large
and the particular forests on the frontier at Riverside are different from the forests on the
frontier at UCLA. Now whether they’re more important forests or not I think is really
something that can’t be differentiated until after you’ve harvested all the lumber and seen
what it sells for.

(Laughter)

But, so that I think you know, scholarship is an individual thing, particularly in
universities, and you can never say who is going to make the monumental, earth shaking
breakthrough. The more faculty you have and the better you treat them, the more
resources you give them, the more you increase their chances, but I always remember that
J Willard Gibbs published his monumental works that brought forth thermodynamics in
the Connecticut Journal of Science, which is not a main trench journal and the folk
tale at least outlines that he had to pay to be allowed to do some research at Yale. So, it
may be that one can make the big breakthrough under less than perfect circumstances so
that I feel that the faculty on any one of the campuses of the University, a given
individual may, if he has the time and the ability to do research, that he may have the
opportunity to make a very substantial contribution, in fact, I know such contributions are
made by these people. Now, whether they can make them better if they were at UCLA or not I think is the kind of thing that is unanswerable.

J: During—before UCR was declared a general campus, what was the relationship of the Physical Science Division to the Citrus Experiment Station?

S: Well, I would say a fairly close one on an informal basis in the sense that we had jointly purchased this infrared spectrophotometer just prior to my arrival in '56 in which the money had been pooled from a number of sources. And then this Cary Model 14 again represented resources from both the Physical Sciences and the Citrus Experiment Station. Furthermore, there were a large number, and still are, a large number of chemists in the Citrus Experiment Station as professional scientists working on the mission of the Agricultural Experiment Station and so there was this liaison. Then and now, they participate in our seminars and so forth so that I think there was a reasonably close one, although their purpose, why they were hired and what their responsibilities were, were quite different from ours. Theirs was always a non-instructional one and always acting as professional chemists on agriculturally related problems. So, they were, when recruited, they were not looked at as to whether they would develop into great teachers or whether they would be particularly qualified to supervise graduate students or not; whereas, the recruitment in Physical Sciences always, in recent years and even in the early years, it looked to that as a major thing.

J: Did you ever feel that they felt you had usurped some of their functions by coming here?

S: No, I don't, I never felt that. Some of them over the years have wanted to change their purpose from one of being a professional chemist working on the mission of the Agricultural Experiment Station to become a Chemistry faculty. That has, I think on average, been resisted although the Chemistry Department has developed a policy of being agreeable to joint appointments when the person in the Agricultural Experiment Station has the capabilities and the qualifications that would be equivalent to a person the
Department would seek on the outside, which is a very demanding criteria and so far has only resulted in one joint appointment. But that I think is not surprising because, as I say the route to recruitment or the purposes of recruitment are quite different for the two agencies and so it will be rare when they will mesh.