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## Interview with Dr. Erich Blossey

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**Oral History Interview with Dr. Erich Blosssey**  
**(6/2/05)**

Zhang: Good morning, today is Thursday, June 2<sup>nd</sup>. My name is Wenxian Zhang, head of Archives Special Collections. Here's Dr. Erich Blosssey, two of my students, Lily and Corey. Dr. Blosssey, tell us first about your family background.

Blosssey: Okay. I was born in Toledo, Ohio to parents who never attended college. In fact, my entire family, no one had received a bachelor degree before my own experience. And I grew up in northwest Ohio in Toledo and Maumee, had pretty good schooling and went off to Ohio State, and from there went to Iowa State, Carnegie Institute of Technology and so forth. But basically it was good schooling, and it was a good environment. But I did not have a lot of help from my parents in terms of education.

Zhang: Okay, tell us about your education, your grade school and middle school.

Blosssey: Grade school? (laughs) I can't remember back that far. Ah, let's see largely, initially in Toledo, Ohio, a very large school. And then we moved, I think when I was in second grade, to a smaller city suburb of Toledo called Maumee, and I went to the grade, the various elementary schools and high school there. And that was a very good opportunity in terms of education and so forth.

Zhang: Your college experience. Share it with us.

Blosssey: Okay, it was very unusual for me to start off as an only child to go to college away from home, which I'm sure caused a lot of trauma for my, certainly for my mother and perhaps also for my father. But I did it and it was a great experience at Ohio State. A very large school obviously. In fact, probably about fifty-five thousand students. And, I always wanted to major in chemistry and that is what I did at Ohio State, and, so that was an excellent experience there. The most significant that had happened in my senior year at Ohio State which had a lot to do with what I've done at Rollins and that was I undertook a research project with a professor I'd had for organic chemistry and worked in his office. He had a lab-office sort of combination. And I think that's what turned my career around. He was very helpful to me, and we almost synthesized a molecule called cyrptopluerine. We got to the very last step and a guy at Duke, which I still regret that he ever did this, beat us to the punch. And so we did not have an original publication. But from there I went to, he'd suggested going to Iowa State to a friend of his who was a postdoc with the biggest name at that time in Chemistry was Robert Burns Woodward at Harvard. And Ernest Wenkert then took me under his wing and I did my master's. I left there because he was moving to another institution. And I moved to Pittsburgh to Carnegie Institute of Technology later known as Carnegie Mellon and that probably was my best experience in the sense that I really sort of blossomed in terms of understanding chemistry and I did a Ph.D. in three years, which at that time, was fairly fast. And then, that experience, and my mentor there, Mort Ruben, said, "Why don't you go get a post doct somewhere?" And he had a friend at Stanford who he had worked for

and I didn't want to work in that particular lab so instead I chose another person at Stanford, who was Carl Djerassi, who was acknowledged as the mother of the birth control pill. A multimillionaire at the age of less than forty, and also published a record of over five hundred publications before the age of forty, and also was the first for someone at that age level, less than forty, to be a full professor at a large research university. So he was an amazing person; still is. That was a, also a very turning point in my career in terms of working under those conditions. From there I then moved to Mexico City where he, he owned Syntex Pharmaceutical Company, which is now a part of Rhone-Poulenc-Rohr. It's a typical thing of a US company, a pharmaceutical company that's now owned by people outside the United States. But anyway, he thought it'd be a good experience to go there, and it was. It was a culturally lifting experience to go to another country, and spend a whole year there. Did a lot of travel, enjoyed the Mexican people very much, particularly their art, and so on. And then it was like, Okay what's, what's going to happen next? And in my time there, I decided that I really didn't want to do large research university environment. Instead I was thinking about—I really enjoyed, in the past, teaching as well as research and I needed to find something like that.

So from Mexico City, I moved to Crawfordsville, Indiana, to Wabash College, and this is pre-Thad Seymour days. Anyway, that was a very interesting experience because it was an internship for only one year. They could not have hired me there, although I don't think I wanted to stay there. It was a strange environment of having nothing but males, uh (laughs), anyway. Then from Crawfordsville, that experience of teaching, of being involved in committee work, doing all kinds of things that faculty actually do, which most people coming up through the chain don't understand. But I was taken into faculty meetings, to committee meetings, advising students, teaching in the classroom. And also, I had an undergraduate who, we eventually published a paper in that one year that I was at Wabash, worked together on a research project. And that experience decided—for me decided that I should go into a liberal arts college, and—Which was amazing, because at the time the largest school was Ohio State at fifty-five thousand students, Iowa state was about thirty-seven thousand, Carnegie Institute of Technology at that time was around ten thousand, and so I never experienced a really small school like Wabash of seven hundred students. So small school might be good. And just the environment and to get to know other people in other disciplines. That you don't have to just stick in your own discipline. You can get outside and enjoy the intellectual atmosphere of having other people that you can communicate with.

So I had several choices and decided that the one that probably everyone thought I should've taken, which was Beloit College in Wisconsin, because it had a good reputation and so forth, also had a faculty, in Chemistry at least, of being rather mature. And I knew that my input into their decision making process was probably going to be limited. And instead I came to Rollins and had never been to Florida before. Never been very enamored of Florida but came here anyway because of the challenge. There's a tremendous challenge of being involved in the design of the final stages of the Bush Science Center, which we now have. And the other was, talking to various faculty members, that there was a very close-knit faculty at that time. And I'll get back to another factor of that, like why that was true, I think. But basically we saw an opportunity here to really do something that was not possible, probably, at a more establish school. Herb Hellwege and I were the only people teaching that first year, for

me, which almost killed me. (Laughs) Teaching the entire chemistry curriculum, six days a week, Saturday labs. And from that experience that first year, I said to Herb one day, “You know, we’ve got to get some help.” He said, “Yeah, we’ve been approved for another person.” So the next year, my second year, we did have another person come in and we then had a chemistry faculty of three people, which was amazing. We could now teach most of our courses without having to do Saturday classes. We also, in that time frame, were also working on the hourglass curriculum, which I think was probably a milestone and set Rollins, nationally, apart from many other schools. And we have not done so since. But that was really a major event, in terms of academics, of a curriculum reform, a different curriculum, one that certainly changed this institution and probably set it on its way to bigger and better things. Largely because many people were interested in this. We were far— We were ten years in front of other schools that were doing, at that time called foundation courses or a single course for entering first-year students, which is what we had. Harvard came along about eight or nine years later with a plan that was similar to that, which is part of, eventually, their core curriculum. But we were very— on the cutting edge of curriculum reform, and that was a tremendous task to put that curriculum together. I only did ancillary things, since I was a very junior faculty member at that time. But that was, I think, a big turning point in the institution.

Largely then at that time with Hugh McKean, who was a visionary, he had a tremendous insight into doing new things, and doing things in a very exciting fashion. He was very poor on carry through, which we know about some administrators in that aspect. But he had the ideas, and if he could get people to do the rest, to take his plan and go forth with it, he was probably the most innovative president we’ve ever had at this institution.

After moving into Bush Science Center that was a very big change for us, in terms of the sciences and began to put us on the map. Largely with students from the surrounding community. We had a number of really outstanding students at that time recruited from within, say, the greater Orlando area, and turned out really superb students. Both in research and eventually in their careers, either as—some as professors at other institutions, a lot of M.D.’s, some dentists and so forth. But that was sort of the golden age of sciences for Rollins because of the newness of the Bush Science Center, and probably at that time a greater emphasis on the actual carrying out science and doing something with it, and so forth. I think that probably has not been reached again. Number wise we have changed a lot. But that period in there was probably very exciting to all of us, because of the—still using the hourglass curriculum, using, largely, a modified quarter system at that time. We did not have the semester system that we have now until, I guess, about twenty years ago. But that also led to the winter term, the infamous winter term, which the students today have no knowledge of (laughs) and it was a very exciting time in terms of doing winter term courses that were different, where a student took only one course and could do things that were not possible in other ways. Field trips in biology that were not necessarily possible during the academic year, the normal academic year. And in chemistry, largely to do, everyday, doing research in the laboratory, which is very difficult to do in a normal academic year.

So that was I think the point where we got to the presidency of Jack Critchfield was in there. And improvement of student body was one of Jack’s selling points to the

faculty when he was interviewing as a presidential candidate. And he did deliver on that. There was a quantitative improvement of the student body.

And from Jack Critchfield we went to another phase and that was Thad Seymour, who was interested in making Rollins better known, and he did that in several ways. I think that was an important thing to do at that time. It's interesting that Hugh McKean said to me at one time when we were talking, about two years before his death, and this was a luncheon and I don't know what his motive was for the luncheon. I enjoyed it, but he was saying one of his failures was that he never was interested in raising the endowment of the institution. And it's largely because, and I know for a fact, that his wife, at the end of the year, having been involved in budgets at Rollins for thirty-seven years, would write a check to balance the budget, and so why worry about an endowment (laughs) if you could write a check that can balance out the books. He said he was just not interested in doing curricular— I'm sorry, doing endowment work. And I think that sort of carried over.

Thad did do some. Jack Critchfield, probably, was most recognized, of all our presidents up to the current one, in terms of working in the businesses community. Jack was an athlete, a good golfer, and knew how to apply the pressure to business leaders in this community, and did achieve a number of gifts to the institution from business. After Thad's very remarkable, I think eleven [twelve] years here, we then went with Rita Bornstein and her mission was clearly spelled out to her, in terms of her presentation to the faculty as a presidential candidate, that she wanted to improve the endowment. And everyone here said, "Yes." And I think that was certainly a milestone for the institution to have someone like her to do that, and changed, again, the institution. So each of the presidencies I've served under from Hugh McKean; Jack Critchfield; and actually an interim president, who was a good friend at the time, Fred Hicks, for one year; and then finally Thad Seymour; and Rita Bornstein; and now Lewis Duncan. They all had certain challenges and have met, at least the past presidents, have met them. And that's where we're at today.

Zhang: That's great. Let's go back a little bit. You mentioned you were always interested in Chemistry as your major and career choice. Why was that?

Blossey: Probably started— Yeah, started out at a very young age. When we moved from Toledo to a small town called Maumee, in the house we moved into in the suburban small town, there was a chemistry kit. And so I soon took up chemistry there at about the age of seven or eight. And today this would not be possible because most mothers would never allow their children to, first of all to ever to have a chemistry kit. I think this is what's wrong with society today. It's like, "Oh they can blow up the house!" Well, yeah, they might. But they also can explore things and learn things, and if they understand what they're doing, you can also become very, very interested in a variety of things and I did. From that point on, there never was any doubt in my mind, and still there still is none to this today. It's exciting. Everyday is really exciting to me, in terms of new things happening and stuff that we're doing in research. Largely I think it's the research that motivates me. And then from the research is to actually impart that excitement to my students. We try to interpret for them what all this excitement I have, what it means to them in their own life, and how chemistry does impact your life, in

every day, in every minute, in every second. It's so important to everyone. And unfortunately, society doesn't know that.

Zhang: Okay. When you came in 1965, what was your impression of the school and students then?

Blossey: Uh, there's a lot that— The campus, at the time, having never been to the south, and never having been to Florida, it was really— I didn't— I was not in a position to really judge very carefully or very cautiously, what construction was here. That, 'a,' you never build a house or building out of wood since there're things called termites, in Florida, that will eat your house down, okay. So I didn't understand that. But most of the campus was wooden houses. I thought that was really strange. Most of the dorms— the only dorm that we currently have, I take it back. The dorms were largely what we call the fraternity sorority houses that we now have, those are here. But the large, independent, or whatever you might call them, dorms, were largely constructed out of wood. So that was a concern of mine. It was like, Well, you know, I've heard about hurricanes striking Florida. It was like, Hm, it may not be good to have a wooden house; think of the three little pigs. Anyway, we then looked at just the fact that everything's so green. One of the things I found looking at the campus was it's so flat, and I soon discovered that's what most of Florida is about, is it's sort of flat.

The administration, like I said, Hugh McKean was involved in everything. And most of my interview on the campus was conducted with him, which is not the case anymore. He was involved in the salary negotiation, he was involved in— I was trying to get some kind of moving expense to paid by the institution. That all had to be negotiated through Hugh. He was the keeper of the checkbook, as it were. But he was, you know, obviously impressed me in terms of his knowledge of academics and his interest in improving the institution and a plan that he had for doing so, which he shared with me.

The other was that the people that I did talk to were all very excited about the prospect of getting a new science building. Because at that time we didn't have any of the Cornell buildings. We had the Annie Russell, the chapel, obviously and a number of buildings, other than Carnegie, were wooden structures. The math department was housed in a house over by what is now the Ruth House. And so it was amazing to me that, you know, we had this campus and yet we had leaders that said, Okay this is something where we want to go. We want to take the institution to building better buildings and a better environment for the institution. And they were all impressive. The dean at that time, or the Dean of the College I guess we'd call him, who was the what we would call today the Dean of Faculty, was not that impressive, but that was okay. He served his purpose I guess. But the faculty I did meet were largely in biology and physics. And John Ross was one of those people that was very impressive, in terms of what he had already accomplished here, in terms of teaching, and a very large research program.

That was sort of exciting to me that there was somebody here that was interested in doing that and to doing research with students, which was my thing. I did not meet Herb Hellwege; he was on sabbatical that year. So there was nobody initially in chemistry, so I talked to no one. I toured the place and it was like I was trying to figure out what is this stuff (laughs), not having seen some of what I would call instruments and

equipment that should be in a museum rather than in a chemistry building. So that was sort of— I saw that there was an interest in improving, so I think that's the key thing, and from there we then went on with that.

But the students— I talked to a number of students, and in my first year was very impressed with their interest in academics, that they were highly qualified people. And I, you know, initially when I came down here from the north, I was afraid that maybe the students were not as motivated or interested in academics and maybe were not as well prepared as what I'd encountered, say, in Indiana, or Ohio, or California, or Pennsylvania. And it was not true. They were very well qualified, very interested, and very appreciative of whatever I did. I think that was, to me, was extremely important and they knew that I was very much interested in teaching, and that my teaching was to get them to learn and to perform well for themselves as a, not only as a student here, but as a life-long learner, which is what one of my goals always has been.

Zhang: Tell us about your involvement with the design and construction of the Bush Science Building, why there are no windows on the first floor (laughter).

Blossey: This all had to do largely with Hugh McKean, because the exterior certainly was, was his baby. He had sent somebody that worked for him, or did something I guess, I don't know if he was a college employee or not, to Italy to select the marble which you now see outside. All the exterior parts that have non-stone stuff is actually marble stone, the platforms and so forth. And you'll notice there's a number of niches around the exterior of Bush, both on the front side, facing Crummer, and on the side facing the Warren Building, the administration building. Those niches were to have statues in them, and again they were— The marble for the sculpting of those things were to be done from Italy. So this was all hand selected marble that came from Italy.

The faculty was not too happy about the decision to do that, because we saw that we needed more money in the interior. And even to the extent that, on all floors, there was a picture molding that was run around all the floors, and they were to have oils and so forth put into the building. This was achieved after a while and John Ross objected to the fact that opposite his office on the first floor, which is now occupied by Don Griffin, there was a nude painting. And so he objected and had all the paintings removed from Bush Science Center. We then had picture moldings with no pictures in them. That was one thing.

Where the, I guess, the Mac lab and where the network engineers are on the second floor, was our library. And that science library was fairly well populated with both journals and books and so forth. It was well used by the students, and we had a big fight with the administration over moving that over here to what is now Olin. Because, as you know, all science crediting bodies, including our own chemistry, demand that we have a science library on the premises of the laboratories. But we lost that battle, like many others. But the, the involvement of the faculty largely was done by John Ross, but we had selection then of materials that went into the benches and so forth. Certainly, we selected all of the equipment that went into the building. And so that was not done by some architect; the architect had never designed a science facility. And it came to pass in terms of acknowledgement of that fact when we have, in each of our large laboratories, an emergency shower, because of a possible chemical spill. We soon detected in the

plans that there was no drain for that shower. So if a student went up and pulled the emergency shower, the water ran out into the lab. And we said we couldn't have that. But they said, We don't have a way of getting that drain in. Well we said, "We should figure out some way to get that in." But yet again, another battle that was not won by the faculty. But we were involved in a lot of details. And particularly I think it's a credit to John Ross who spent many, many hours going over details and working with the architects here of Winter Park to carry that out. I can't think of the architect's name. It was Rodgers and Fritz. But they did work with John and eventually trusted him that when he said something that was important. Except for the drains, that was okay. So the faculty had input largely on the interior. But the exterior was, because of those statues that were to go in the niches, there was going to be no windows in the first and second floor. That was a decision that was made through the administration and the faculty had no input into it.

Zhang: Okay, that's so interesting. You mentioned about your first year you came over here and you taught some foundation courses. What other courses have you been teaching throughout your Rollins career?

Blossey: It's hard to remember all of them.

Zhang: But what— what did you enjoy the most?

Blossey: Uh, both the major courses, because I teach largely, initially, I teach at the lower level. Not the first year, I teach second year students. It's those courses and the non-science major courses that I've had a lot of fun doing. And in the last fifteen years, I have not been able to do the non-science major courses. It has to do just with the way our curriculum is set up and we have had a small department, and so we've hired adjuncts, largely to do the non-major courses. Which is not what we want to do, but that's the way it's worked out. And, you know, we keep talking to the administration about, you know, how that can be alleviated, and it's largely that we have to have another faculty member. So there's this thing about adding another faculty member. It's a major involvement for the administration in terms of budgetary impact.

But I think, going back to courses that— One course that I really developed and really liked doing, although it was a lot of work, was a course called *Photography: The Meeting of Art and Science*. Largely because it was for non-science majors. And I used the fact that in those days, the fact— I'm sorry, the students were very much interested into photography. And so this was the case where I actually taught them to take pictures in the camera, take the film out of the camera in the dark room in the total darkness, put it into a film developing can, develop the film, and then take that film and then make enlargements and make black and white prints. We also did some color work as well. But that was the goal of that course, and it meant that I had to keep track of four dark rooms in Bush, which was an immense challenge, involving five days a week of doing that. And also to help with our stock-room person, at that time was Beverly Bridge, who is still there, making solutions, gallons and gallons of solutions, and we'd stock those things. But we did all kinds of things. We did some physics, we did some chemistry and actually some art in terms of how to compose things in a camera and so on. And I think

it was highly a successful course, but, you know, a lot of work. And eventually, because of departmental changes, we lost a faculty member who was no longer permitted to teach the basic major courses, and so I had to do that all the time. And that person went to teach non-science majors. That was probably the most interesting.

The foundation courses we taught in two different ways in the sciences. There was a biology course, largely, and was never really integrated with the rest of the sciences. The remaining sciences, which was principally physics and chemistry were taught in the foundation course. And that involved, and I taught with Bob Carson and also Don Griffin in team teaching. And that was the major thing in the general education courses, that they involved, say for example, humanities, which also encompassed history at that time, which is not one of our divisional partners. Six people teaching that course where all students were required to take it. They divided up into a couple of lectures a week and then a couple of discussion periods with all the six faculty members. And, for example, the historian might be presenting something of the seventeenth century, or something like that, historically speaking. The other remaining five members of that team also had to do the discussions. And that meant that you may not have been a historian, but you'd better be up on what the historian was talking about in the lecture. And I've mentioned this to our current faculty, and they are not interested. They don't feel like they— They would be, maybe, put in a position where their lack of knowledge in that area became too apparent. And it's like, I think, You know, you learn and if we're all in this game to learn, and if you can't do that, then you're much of a faculty member. That sort of a thing. So that's how I feel about the current conditions here.

But that was an exciting period. What went wrong with it was largely the fact that these people, these same people were doing the foundation course, over and over again. And it was an immense effort. There was a lot of organizational aspects to it, as well as just teaching and doing the discussions and keeping track of grades, and all that kind of stuff, which goes on in normal courses. But the same people were doing it and finally got tired. And they said, Okay, we're getting tired of doing this, and we need to change the curriculum. So we went back to what is now the Alphabet Soup Curriculum that we're doing. Which I think was a mistake, but that's—

Zhang: I was looking through your folder and I noticed this paper, it came to my attention, the New Approach to Instruction.

Blossey: (Laughs) That's old.

Zhang: Tell us a little bit more about this new approach that you—

Blossey: (Talking at the same time) I'm trying to think of what was I saying was the new approach.

Zhang: I think it's called the Keller—

Blossey: Oh, okay, yes.

Zhang: The Keller Plan.

Blossey: Yeah, we did this. Actually this started with John Ross; came to me one summer, he'd been to a conference. He said, "You know, we ought to teach this-" At that time, a major course, which involved chemistry and physics. And physics was taught in the very first semester, and I participated as a chemist with John, but I would just do the discussions and so forth; he did most of the lectures. In the second semester, then John was also participating in the discussion but not the lecturing in chemistry. So we slit up the course that way. And this may have been 40, 45 students who were chemistry or physics major or biology majors that needed chemistry or physics. So they got at least one semester each of those two courses. Anyway, this was going on for some time and he came back from this conference and said, "You know, we ought to try this new method." And I said, "Well, what's the new method?" And he said, "Describe what is called the Personalized System of Instruction, PSI, which is also known as the Keller Method."

Fred Keller was a psychologist who had devised this particular program. And at first I was like, Okay. He wasn't too sure of all the details of it. So we got some more materials and that summer we put together this physics/chemistry course, that actually I had brought to Rollins from Wabash. This is how Wabash taught their non-majors as well as their majors at Wabash.

But we devised the course during the summer. We wrote in the neighborhood of about twenty units or chapters each for the two semesters, wrote four quizzes for each unit, which meant we wrote about eighty some quizzes each. And our -Oh yeah, it's a tremendous amount of work, and started the course of that fall, which would've been the fall of 1974, and it was very successful and I decided, okay well besides doing this first-year course that I would try organic chemistry.

So I did, and on the side I was also teaching that. And so I did a PSI [Personalized System of Instruction] unit on that, which I think that paper is referring to, is some of the stuff that we did in that course. And also, we did the biochemistry course, which was the other course I taught at the same time. So it was a very large effort, which was very, very successful. We did a lot of measurements of the outcomes of the students. In particular, their ability to retain information. We found that the Keller/PSI method was very good for retention of information in science. And that attracted me in terms of organic, which is usually taught as a lot of facts. I don't teach it that way, but some people do. And then soon students forget all the facts. But the other is biochemistry, which is all very fact filled, but one has to be able to see the relationships from one thing to another, and again the PSI method was very good for that.

But I killed myself doing all that work in that time period because again, writing all these units, we published a book with John Wiley and Sons Inc., which was a PSI method for organic chemistry and the biochemistry went on their own. The unfortunate thing is, in the PSI method, you use student tutors that are, normally, are the people who've had the course the year before. Well biochemistry was the senior-level course and so there was no students that wanted to come back in the fifth year and help me as tutors into the biochemistry course and so that was all on my own. I was the tutor, the writer of all the units, the grader of everything, and so on. So that, that probably was bad. And eventually I did drop doing that. I think by 1980, when Larry Eng-Wilmot came, we were still doing, we'd separated out chemistry and we were doing that PSI and I was doing organic PSI, but about year or two after that we decided it was just too much work, and

Larry convinced me that it probably was just too much involvement in that and that we ought to do some other things as well. So we dropped it, but it was highly successful.

Probably some of the greatest teaching experiences I'd had, working as the tutor in the courses, because a student would come in, you'd grade their little test. Usually about a twenty to thirty minute test. You'd grade it and you'd point out their errors, and if they did not succeed at the ninety-five percentile level, they failed the test. And what that meant was that they'd have to go back and study some more and come back and take another form of that test. And it was the same kind of questions, but different problems. And so at that point, when you graded this, you had an opportunity to talk to them about the mistakes the student was making. And at first it sort of bothered me that I was sitting there with this student watching me grade, when most of the time professors grade papers without the students ever watching. So they're watching you as you grade this, and you put a big red X on something and it's like –This fear and trepidation on the part of the student and I think it might manifest in a negative reaction toward me. But this is, I learned that this is okay and that they actually then enjoyed the fact that I would talk to them. "Okay, you need to look at this, and look at this." And they'd open the book and say, Okay. "And what don't you understand about this?" So they would have an immediate response from what they had just put down on a quiz. That to me was probably really exciting because there were times when you could see the student go "Oh!" The 'Ah!' moment. It's like, Okay, ah, that's how you do that. And that was extremely useful and very exciting to me as a teacher to have that experience.

Zhang: That's great. I understand you were always a strong supporter of faculty research. Could you tell us more about your work in that area?

Blossey: Yeah, I think to me I fought administrations up to the deans in the past here about this. To me, the highest form of education is research, and we need to understand that. And I have little respect for those that don't understand that because if you really understand anything about learning, learning theory and so forth, that's where the highest form of, actually education, is research. But it's not the faculty's research, and that's what administrators tend to misinterpret. They do that I think because, again, lack of knowledge and it's, the onus is put on the faculty to try to describe to them, what we're talking about in terms of collaborative student-faculty research. And that's what, how we're learning and to me it's probably one of the highest forms of education, simply because a student is going to see that they must learn something to do their problem, which they get very excited about. They need to learn something, you know, some background, or some concept, some fundamental to be able to do their particular problem at hand. And I don't care what area it is, it doesn't matter, doesn't have to be science, it can be anything. So that I think culminated in about 1994, when Pedro Bernal came to me in the summer, actually, not in the summer, and said, "You know, what we ought to do is try a collaborative research program." Suggested by Pedro and by Steve Briggs who was the dean of faculty at that time, and rising sophomores, people who'd just finished their first year of chemistry or physics or whatever could be involved in a chemistry program doing research in the summer. And it really was unheard of. And the results are very new nationally. Michigan State had tried something like that and a few small colleges had, but most institutions had research in the summer only for rising seniors, okay, because it's

going to be part of their senior thesis or whatever, and we had done that since day one when I came here. We already had that, in 1965, established at Rollins of having senior research and summer research with rising seniors. But to have a first-year student do research? And at first I talked to Pedro about this. "I'm not so sure about this. They have no knowledge –They haven't had organic chemistry yet! How can they do a problem with me that –I'm an organic chemistry professor." And he said, "Well, I guess we'll have to teach them that."

And that's where this comes in. Because I had three fantastic students who were all Cram Scholars, and they did a fantastic job that summer and what I did was to show them like lab manuals and here's a technique you need to know to work on your problem. And okay, so here's a motive for that student to learn; they had to learn that material. So they'd go do their little lab experiment that's like most organic chemistry students would do and they knew what the answer should be for that, and they said, Okay now I've mastered that, now I can go do this thing on our own, which is our research. Research is always about learning new things and new compounds and so forth. So it was like, Okay now I can understand this. So that's how they learn, and they learned a tremendous amount in ten weeks that summer.

Ah, two are M.D.'s now; one is probably going to head up a surgical unit down in eastern Miami. He's very good, well known down there as well as here in town. The third one is now a director of a pharmaceutical company in Virginia; and he's a Ph.D. in chemistry from the University of Virginia. And so all three of those were obviously outstanding students to begin with, but that thing also motivated them to go into something like this. That this is, this kind of student faculty research is really exciting for them. For me, too.

Zhang: So that's really the first of the students that did summer research?

Blossey: Yep, it started in chemistry. Yep, that's right. Started that summer of 1994. With no money. We had some money we used out of the chemistry budget to buy stuff and the faculty received no money whatsoever, which is normal for the summers. I just like to do research. I think the students were paid principally a sum of five hundred dollars, which even in 1994 wasn't much. But they enjoyed the experience and they always remark about it. And came back, all of them came back, and did summer research after that as they progressed through Rollins.

Zhang: Your work with summer research really goes back to the early years. According to your archive file, in 1982 you actually went to France with a student to present a paper there.

Blossey: Ah, 82. Yeah, that was –Right. That was ah –Right. I also went to France not twenty years ago. Yeah, that was from a summer research program, and that was the, an International conference, which we still go to. I went to it recently with the twentieth reunion of that same conference. It was held in Lyon, France and I'm trying to think who the student was that I presented the paper –But it was an international conference on my research area which is polymer supported reagents and reactions. And that was my first foray into Europe.

Zhang: So over your career at Rollins, any particular research project you'll always remember?

Blossey: No, I think that many are just ongoing. There are various aspects and you just keep on. There are changes, and different things have happened. Right now I think my research has improved a lot with two collaborations and again I had some difficulty with an administrator, I won't reveal that person's name, recently about collaborations, and science today is hardly anything done as an individual. In fact, scientists say if you're really smart you never do that. You find some collaboration because the problems today are getting more and more difficult, that is both in physics and chemistry, which are physical sciences, have become more biologically oriented. And to do that, you need some help from other people. And people from the biological areas need the help of a chemist or a physicist.

So I've recognized through working together, we can produce a much better project, and a better research outcome. I think that's the thing that's happened to me is that I've got two remarkable collaborations. One with Mike Doyle, who's the chair of the University of Maryland in the chemistry department. A long time friend I've known for over twenty-fives years back when we both had hair. He has less than I do now and I always point that out to him. He's a remarkable person who went through, again, the liberal arts institutions and published immense amounts of research, first at Hope College, which was his –No it wasn't his, it was his first department. Then to Trinity University in Texas, then more recently to the University of Arizona. He was then president of Research Corporation there. And then left that institutions and became the chair of the department in Maryland. Anyway, that collaboration is still ongoing, and we're doing a lot with publishing papers and I've got students now working in that area, which is real exciting. It's about making polymer-supported catalyst that are in some ways geared to non-supported methol (??). Ordinary solution chemistry is what Mike's been working with and now I've been able to take some of his information with these catalysts and you put them on to a polymer where you can retrieve the catalyst and reuse it which is not possible with solution catalysts, because it'd get stuck. And so we're working on some things that are just not possible in other ways, which is real exciting.

The other collaboration is a friend I had in my last major sabbatical at Harvard. Watson Lees, who is now at Florida International University, and this is on a biological type problem of protein folding, which is a big interest in all science. And we've been interested in this for some time here, and doing very small things and we think we've got some, again, some types of compounds that are, can be put on polymers that will react in ways that are not possible with ordinary solution chemistry. So those are, I've got students working on that now. One in the summer and one that just graduated and one the year before working on the same project. It takes time.

Zhang: Yes. So you mentioned about your partner in research, but over the years you have been teaching at Rollins, what, if any, particular students that you will always remember them, or cherish them.

Blossey: No, there's just too many! There are over a hundred students I've collaborated with in research, which is, you know, sort of amazing. But, you know, you look at the number of years it's (laughs) not too surprising. I think there's just too many to single out one. I think probably one that comes to mind, I guess I can, since this is going into Archives and nobody else will probably look at it. I'll mention because he's a very interesting student, and I tell this story in class all the time. Gerry [Gerald] Tremblay was a student here from Orlando who came to Rollins and worked with me on a biochemical problem, of again, polymer-supported B vitamin. And he did a pretty good job. We didn't complete the thing. That's the usual thing. Students have to realize, you know, that research is going on and on and on and they're just doing a small part of it.

But Jerry left here, went to Gainesville, and got his M.D. And we stayed in contact, he would, you know, E-mail me or something over the years, or call. And one day he said, "You know, I'm practicing now." He went on and did, uh, two residencies, one in pediatrics, and one in neurology, which is very unusually. So, he said, "You know, I'm either on neurological pediatrician, or a pediatric neurologist. I don't know which yet." And he did that for a while, and seemed to be very at ease with it. But pretty soon, he called me up, I think he called me on the phone and said, "You know, I'm getting tired of this. I'm going to do something really strange. You're probably going to wonder why." I said, "Well, what are you going to do?" He said, "I'm going to go get a law degree. I'm going off to get my J.D. degree." I said, "Oh, you're going to do malpractice stuff." He said, "Oh, not necessarily." So pretty soon he calls— E-mails me now, we're in the age of e-mail, and he said, "You know, I'm really bored with this stuff because all I do is these malpractice suits. And it just, you know, I'm not challenged by it anymore." And, I said, "Well, okay." He said, "Do you know what I'm doing?" I said, "No, I can't guess." He said, "I'm going back and learning organic chemistry." (Laughs) And he said, "I got this book. I bought this book from Amazon and it's called *Advanced Organic Chemistry* and I can't understand it." And I said, "Well Jerry it's been twenty-something years since you've took organic chemistry at Rollins, and you probably need to go back and refresh your memory on the basic organic chemistry so that you can then really get excited about this organic chemistry stuff." And so he said, "Okay." And we corresponded about different questions and so on.

More recently, he's now back into a medical field. He's now director of neurological pharmacology at Wyeth Laboratories in Philadelphia. And he's got a very fine position and I'm happy that he's now gotten back into that, and actually is now using his research skills that he learned here at Rollins. That he's not practiced since then and is applying there. He's very grateful for his experiences here.

That's a case of someone who, very bright students typically do this and I've had a couple of others like this, go off to medical school, practice medicine for a while and find that they're bored. That they don't have a challenge enough anymore. You know, it's the same snotty-nosed kid every day, or something like that. It's like, Oh! And they get tired of that. And so they try to go off in other fields and I've told students in my classes, since ninety-nine percent in my organic class think they want to become M.D.'s, I said, "Well you know, there are problems with it that you'll see. Medicine can become very repetitive. Not that it has to be, but it can be. As a result, you could get bored and maybe not be as productive as you'd like to. So there are other fields." We've had a number of cases, some recently really exciting cases, where people say, Okay, I don't

want to become doctor, I want to become a scientist of some kind. And they have, and they see that science is this thing like I described earlier. It's always new, and something's new every day; you never get bored with it. Never. And so I think that's a case. I think our department has done that with a number of students. I could enumerate probably a good half of the chemistry majors in the past five years have gone from a, potentially going from an M.D. type degree to a Ph.D. and succeeded. I think that's amazing.

Zhang: Now moving to a different field: your service to the college and to the community. I understand you were president of AAUP (American Association of University Professors) here at Rollins.

Blossey: Yep.

Zhang: We no longer have that?

Blossey: No, it's one of those things that passed. I think largely when the state system went to a labor contract, and I'm not sure what they are now, I think it's something NEA or something like that. But, you know, that sort of killed off the AAUP here. Lack of interest in it. No, I think the service area— Most of my work has been done with curriculum or budget, finance and service. Thirty-something years of doing that kind of work, so—

Zhang: So forty years is a big chunk of anybody's lifetime.

Blossey: Yep.

Zhang: So, any particular moments in your life here at Rollins that you will always remember? Or any particular events?

Blossey: No, not— A couple I've written down in the narrative I've put on paper. One was just a couple of years ago: to have a daughter in my Organic Chemistry class. And it was both a strange experience for me as well as for her. I told her, I said, "You know, I don't know how I'm going to react to this. You have no other choice." If she wants to go to veterinary medicine school. And I said, "Well, Organic Chemistry: you've gotta have it." She knew that. And she said, "You don't have—you don't have any other organic chemistry professors here?" And I said, "Nope, I'm it." And so Lisa had the dubious distinction of having had me as a professor. And she did quite well, but that was rather remarkable for me. I'm very proud of her.

And my son, also here, who is amazingly a double major in Physics and Computer Science and a Math minor. I'm like, Ah! He is unusual, to say the least and is now in his— I'm trying to think. Third, I think it's his third summer of doing summer research. First couple have been in physics or computer science. He also had the distinction of serving pizza at our, as well all know, the Friday end of the week seminars and luncheons. And he served pizza to the very first group here as a, must have been

about nine years old. And that was his job. I had had him under-toe because his mother was off working at the time, and so he became the pizza server.

Zhang: I remember I saw his presentation last year. It was very impressive.

Blossey: Yeah. He didn't get it from me (laughs). But, yeah, he's an impressive kid. Lisa is, too. The oldest one is a, also proud of her, it's just that she didn't go to Rollins. She went to Georgia Tech, in mechanical engineering.

Zhang: Now looking back, how do you view your Rollins career?

Blossey: Well, I think it's been always interesting that I think I see better days ahead. It's always, I think, a very positive thing. I can be very critical as a scientist can be about certain things that happen at an institution, that were probably bad decisions. And, of course, as we know hindsight is almost a hundred percent correct. But, you know looking at over the years each, as I said, I think each president brought to the institution a different approach to how this institution might become better. And I think that has—that actually has excited us all, and I think that's what we look forward to now. And now, looking back, I can see for each, for each one of these people. There were times when I felt like Hugh McKean needed to step out of the presidency, that, you know, he had come to a point where his ideas, perhaps, were not as in tune with what the faculty was capable of doing. And that was true for, I guess for, probably, certainly Jack Critchfield and Thad Seymour and Rita Bornstein. I think they all saw or were aided in their decision to say, This is, this is about it and I should let someone else try to carry the ball. In those periods, thought, you see that progress is made by the institution and that you're actually looking forward to a better day. And I think that's where we're here. Certainly, with Lewis' promise that we need to look at the way we can get to the next level for this institution. That's been my view all the way along. I think, each day, I looked at, okay how, how's this institution going to improve and go to the next level, whatever that level might be.

Zhang: Looking back over the last forty years, what do you think would be your proudest achievement? Or do you regret anything?

Blossey: No, no regrets. I can't really put a, you know, a certain event or something that was my proudest achievement. I think, uh, there's just been many and I'm very grateful for all of those. Perhaps last year when Lisa graduated, the fact that I went up on stage and gave her a big hug as she received her diploma. That's always, I think for a parent, that's always like, Wow this is, you know, this is neat. Here's a faculty member who has a kid who's getting a degree. That was a very proud moment.

Greatest achievement? I'm just very happy with all the various teachings that I've done and research that has involved, in every case, students. All the way through my career. So it's like a culmination of all this and you look at it and say, Okay they're all fantastic events, really, when you put them together.

Zhang: Now, looking forward, what's your career plan?

Blossey: Ah, well, still looking forward to a sabbatical, but now to a— immediately to a new curriculum that we're doing in chemistry, which we're going to see whether that works this coming year, when we take organic chemistry and move it out of the second year and into the first year, the second semester of the first year. And it's going to be a general chemistry course, and then first-year students will be going into organic chemistry as second semester of first year. That's going to be a major change in our curriculum, and I'm looking forward to seeing how that works and doing a couple of years of that. Then hopefully getting a sabbatical. And perhaps, at that point, my son also will be graduated out of here, which would ease some of the financial burdens and then I could begin to think about, perhaps, a retirement.

Zhang: No! (Laughter)

Blossey: That's, that's the plans is to, looking forward to a— Had a sabbatical a while back, and what happened is I had to teach as well, because the students were doing research with me and they couldn't— They did not find an adjunct to, you know, do anything, and also I had to teach a course. So it was like it was a horrible sabbatical. It was only one semester, thank goodness. But I want one, sabbatical, like I had in '91-'92 at Harvard. That was probably the most remarkable learning experience for me, and meeting people and still having contact with a number of people. And that, you know, I enjoyed that so much and it—I think it meant a lot to Rollins in terms of what I brought back to the institution. You know, ideas and so forth that, that we need, all need to get out and see what's going on on the other side of the fence.

Zhang: Okay, thank you so much, Erich. I really enjoyed your participation and your forty-years of service to Rollins College.

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