6-6-2018

Crouse, Ph.D., David A.

University of Nebraska Medical Center

Transcribed by: Benjamin Simon
Oral History: David Crouse

John Schleicher: I'm John Schleicher from the McGoogan Library of Medicine at the University of Nebraska Medical Center, and I'm very pleased to welcome our guest today, Dr. Dave Crouse, a long time professor of Genetics, Cell Biology and Anatomy, and Associate Vice Chancellor of Academic Affairs, and Executive Associate Dean for Graduate Studies. He retired in 2012 and was named Emeritus Professor of Genetics, Cell Biology and Anatomy, and Emeritus Associate Vice Chancellor for Academic Affairs, as well as Executive Dean for Graduate Studies. He has continued to participate in many activities here at the Medical Center. I'd like to welcome Dr. Crouse today. We really appreciate you being here. And could you tell us a little bit about how you came to UNMC, and then about your career here at UNMC?

David Crouse: Well, first: thanks for inviting me. It's fun to do things like this. It's actually a long story but I'm going to make it short. I was in a postdoc of the Argonne National Library of Chicago—a wonderful postdoc with great mentors. And approaching the end of it and looking for a job, I'd interviewed three other places—got three offers, which was surprising, but back then, the job market was quite open. But none of them quite fit me. I wrote to a friend a Christmas card. He was here at UNMC at the time, Dr. Graham Sharp. He and I had been in a lab together at the University of Iowa, where I did my graduate work. He was a postdoc, I was a graduate student. We worked together. In fact, we published our very first paper together in the early '70s. Anyway, Graham basically listened to me and my letter that I wrote him, in which I said, you know, "I'm not happy with any positions. I wish I could find something, but I'll stay here until I find what I want." And he called me, because he had my phone number, and he said, "Dave, are you serious about looking for a position someplace different?" And I said, "Sure."

And he said, “Well, I’m chairing a committee out here at Nebraska in our Department of Anatomy is looking for a new assistant professor.” And I said, “Anatomy? You know I’m not an anatomist. That’s not my training. I was trained in Radiobiology and Physics, and all kinds of stuff, but not Anatomy.” He said, “Doesn’t make any difference.” And he said, “We can find a place for you if you do good research.” So, I agreed to come out for an interview. And I did so later in that winter. It was a very cold time when I came out. And, of course, I hit it off with Graham, but I hit it off with a lot of other people. We just were on the same wavelength. There were other immunologists and people in stem cell research is what we did who were doing similar research. I thought, “You know, this wouldn’t be a bad place to get a start for a career.” I liked the town. I liked the fact that it wasn’t as big as Chicago, which is where we were. And we would be in a community that had a good educational system. We could actually afford to live there. Some of the places I’d interviewed we couldn’t afford to live there. And we said, “Yes.” And I came that following winter—or during that winter. And that was the beginning of my career. Like I think a lot of people come to Nebraska, I really thought this was a starter career. I’m going to come here and spend three-to-five years, get a bunch of publications, maybe get an NIH grant—or whatever—then look for a real job. Which is often, I think, the case for people. I came here. I liked it. I wrote my first grant that following spring in an area that I had kind of peripherally that wasn’t the core of my research at the Argonne. And lo and behold, it got funded. Now how many people write their first NIH grant and get it funded? It wasn’t a big grant, but it was a nice one. A three-year NIH grant. And the research went well. It produced a number of publications. I made additional contacts around the country. Began to develop a career. And, on top of that, my kids really liked the city and where we lived. And my wife

Annette made a group of friends. And we became what we'll—I will call "established in the community." So, we set down roots. And lo and behold, now forty years later, I'm still here. If you would have told me in 1977, when I came, that forty years later I would still be in Omaha, and that I would have had a full career at the Medical Center and done a lot of different things that I never thought I would be able or want to do, I would have probably not believed you. I was kind of born to be a bench scientist, I think. I loved research. And that was all I did for ten or fifteen years. I taught also and I enjoyed teaching, but research is what I really really enjoyed. And it worked well for me. Some other additional NIH grants came along. Collaborated with Graham Sharp over the years for, I don't know, thirty-five years. Collaborated together, including our time at Iowa. So, we… we published many many papers together over the years. Very productive collaboration. He would be on my grants. I would be on his grants. And miscellaneous other people would be on it as well. But it went very well. And we branched out, did additional things, tried some new areas of research. The one thing that I liked to tell younger faculty members when they came into the university some time later, is: "Don't think that you're going to be doing this "X" of research that you're doing right now. You'll probably change in your career." I drifted into all kinds of different directions over the period of time that I was at the bench, including more administration and more teaching than I ever thought I would do. But I enjoyed all of it. So, it was a very very good career. I'll stop there for a minute. See if we're going in the right direction.

John Schleicher: So, could you tell me a little bit more about the different areas of research that you worked in?

David Crouse: Well, the areas of res—well, I came as a student of the Argonne National Laboratory. And my research interests there were on "what does radiation do to the immune and hematic system—the blood forming system of the body?" And most of my work at Argonne was with mice and with dogs. Those two species were my research animals. Coming here, we worked—I worked primarily with mice. But, again, it was looking primarily at the recovery of the immune system after radiation and bone marrow transplantation. That was the same time that bone marrow transplantation was emerging as a clinical practice, both here at the Medical Center and around the country. And there was a lot of question about how the immune system rebuilt itself. How do you become able to respond some years later to infectious organisms and diseases—or various events in your life. And so, that was the beginning of most of what I did. I became—in that, I became more and more interested in how the T cells, the thymus-derived cells, are formed in development, and where they come from. And that led me more and more towards stem cells. So, although everything I was doing was stem cell transplantation, now I became more interested in the stem cells that give rise to T cells of your blood—one of the kinds of lymphocytes. And so, I spent several years then pursuing the thymus and T cell development. And grants in that area—worked in that area for some time. That was a tough area. In fact, still has not been beat in terms of "we really don't know how that system works." A lot of things were uncovered, but we don't know in enough detail even yet. And I stopped working in the area probably fifteen years ago. Like many research careers, it moved on from there a bit to the gut. I was—you would say, "How is the gut involved?" Well, the gut's one of your largest lymphoid and immune systems in your body. Your gut has to protect you from all that junk that is down there. All the bacteria and all the organisms living inside you. The immune system is a large—

the… the GI system, the gut, is a large immune system. In fact, just about your largest. And it's very important in natural defense. But, again, within the GI system, within the intestine, we don't know how the lymphocytes who live there and do their thing get there. We don't know what their origins are. And we don't know how they're directed and how they're controlled. And so, I moved from not just T cells, but more specifically lymphoid cells in general that are prominent in the GI system and how they… how they become prominent and how they work. And this developed into another whole series of questions about control of lymphoid development. And we began to understand that, well, part of the control of lymphoid system in… in the gut, in the thymus, and in the bone marrow is the micro-environment. The cells which are around these cells and support them during their development. And so, what our questions became more focused on the micro-environment. What are these other cells? Not the stem cells. But what are the other cells that support the lymphoid cells? The hematopoietic cells that develop your blood and immune systems. And we moved into much more—the micro-environment and how it is controlled. So, that… that—all of this revolved around the interest in stem cells and their development and their control. And we… we moved from the actual stem cells more to the micro-environmental cells and how they're controlled. And, actually, that's where I kind of finished out my research bench career, because later on in my career, I moved more into the administrative arms. As most senior professors have happened to them, I got asked to direct more courses, to serve on more committees, and ended up chairing and serving on more committees than anybody in their right mind would do. But I did so, and I did it with enthusiasm and enjoyment. And was successful, I think, in doing those. And this led me into more of the administrative career. Indeed, it led me to a big change in about 1994-93, in which Dr. Bill

Burnt, who was at that time the Vice Chancellor for Academic Affairs, thought that if I was going to move into administration sometime in my future career, I should maybe get a little bit of training in administration. Scientists are not trained as administrators. And some fail miserably when they try it. And I said, "That's a good idea. What do I do?" And he suggested a program called the American Council of Education—the ACE program. Never even heard of it, as most bench scientists would never even heard of it. And I said, "Sure, I'll try it." And I wrote an application like I would write a grant. Got the letters of support and nomination from Dr. Burnt and others, and applied and ended up being interviewed and selected out of several hundred candidates for a class of 30. They have 30 people in a class. I ended up doing that for a year in '94-95. And I had the great fortune of serving at Lincoln—at UNL, and spending a year at the president's office at UNL with Joan Leitzl and Grant Spanier, who was chancellor at that time. And so, I spent a year there learning administration kind of at their right shoulder. Being able to sit in on all kinds of administrative committees, functions—attending all kinds of functions—actually, doing some white papers for each of them for different aspects of things that were going on on campus—and learned an enormous amount in one year by, I'll call it, on-the-job training at UNL. Also gained a real good understanding and appreciation of UNL, which I don't think the medical center in general.. in general has. Many people don't. So, I enjoyed my year at UNL. And the other part of the ACE fellowship… the A-C-E fellowship is to spend time—several times during the year at seminars—week-long or ten-day-long seminars where you go with the ACE fellows who are scattered around the country in all disciplines, to come together to talk about common issues. Things like budgeting, federal regulations, student finance—all—everything you need to know about what makes a university run. And you actually do workshops

on them and lots of speakers. But it was a wonderful year. I came back from that to the Medical Center and was ready to settle back into a research career, but began, at that time, thinking about and looking for an administrative position someplace. That leads into a rather tumultuous time at UNMC. At that time, we had a chancellor named Carol Aschenbrenner, who, to say the least, got crossways with the faculty and the senior administration in Lincoln. And after a lot of big events, ended up being summarily dismissed. I think she actually resigned. But it was eminent dismissal if she didn't. Dr. Burnt, who had been my mentor—Bill Burnt, who had been my mentor—and he was the Vice Chancellor at the time—became the Chancellor. And he said, "Dave, you're somewhat trained now. I want you to be the Vice Chancellor." And I said, "You're kidding." Frankly—I mean, here I was a professor, yes. But no administrative experience other than chair—chairman of various things. And he said, "No, I want you to do it. I think you can do it. Have at it. I'll get all the support you need." And so, that began my administrative career in 1996. And it was a rather abrupt and difficult change for a while. I was a fish out of water for a little while. And that also then developed into a career that I became more and more comfortable with. And I spent almost two years in that interim role under Dr. Burnt. Then he came back to the Vice Chancellor role, because I was an interim Vice Chancellor. So, he came back to the Vice Chancellor and I moved back to his Associate Vice Chancellor and Associate Dean for Graduate Studies. And he pretty much gave the Graduate Studies program to me to manage. And I did whatever an Associate Vice Chancellor does, which was a lot of variety of stuff. And he served then as another two years, I think, as Vice Chancellor. And then he retired. And, at that time, Hal Maurer was our Chancellor. And the Chancellor Maurer asked me to return again as interim Vice Chancellor when… when Dr. Burnt retired. So, I returned again as interim Vice

Chancellor. Again, for about two years. This time I actually competed for the real position. So, I put my name in the hat to be the Vice Chancellor. And that was a year-and-a-half process again. So, here's another year-and-a-half as interim Vice Chancellor. And I did not get selected. That was kind of a blow to my ego on a lot of other things, but I did not get selected. And a gentleman named Dr. Rubens Pamies, an MD, was selected as our Vice Chancellor. And I really had reservations about whether or not that would work, especially in the area of Graduate Studies. He was an MD—had never trained graduate students, and here he was now the Graduate Dean. And I was his associate. I was quite worried as to whether or not that would work out. I was looking for other positions away from UNMC. And, as it turns out, Dr. Pamies and I hit it off very well. We became not just colleagues, but friends. And I continued to work for him. He handed the Graduate Studies completely to me. And that's when the title changed to Executive Dean for Graduate Studies, which meant you're… you're running it. I continued doing that with him for another year-and-a-half. Decided that I didn't think I really wanted to leave UNMC. And I was going to finish out my career at UNMC. Another three or four years and I'd be done. At that time, I told Rubens I was going part time, which I did. I went part time. And I was prepared to retire that summer. And Rubens went home to Haiti to visit his family and had, unfortunately, a massive heart attack and died. And it was tragic. And we were all very sad. He was a great guy. But, upon that, Dr. Maurer asked me to come back full time as the interim Vice Chancellor again. And we would have another search. Well, of course, I decided I'm not running… I'm not running in this search again. But I'll be happy to be your Vice Chancellor until you find somebody. So, I then served about another year or so, until we hired Dele Davies, who is our current Vice Chancellor. And Dele and I became fast friends. I… I overlapped with him for

about six months to try and ease the transition as much as I could. And he's been a great friend ever since. But that's how, for me, it shows how much a career can change over time. From somebody who was a dedicated bench researcher—never thought I would—in fact, I used to make fun of administrators, as many bench researchers did. We compete with them, we fuss with them. They don't give us enough money or space or equipment. And it's sometimes difficult. We've had some very difficult senior administrators on this campus that were there when I was a faculty member fussing my way through the ranks. But then I became one. And so, I went over to the dark side, as my colleagues said, and became a member of the administration. I always kept my hand in the faculty area. I continued to teach what I could. I continued to go to lab meetings and meet with friends when I could. I continued to go to professional meetings in my scientific discipline, so that I would maintain a freshness in that area. Indeed, I still do that today. Because once a scientist, always a scientist, I think. And you end up loving that kind of career.

John Schleicher: Dr. Crouse, could you tell us a little bit about the course that—developing programs and teaching courses in responsible conduct in research for grad students, postdocs, and junior faculty.

David Crouse: Responsible conduct in research. Boy, that's a big big topic. In the mid-90s, it wasn't even spoken of very much. It became a mandate of the NIH. The—all students received some kind of training in responsible conduct in research. And we had programs that monitor and take care of that, which we did. But I felt we could do a better job. So, we ended up developing a more substantial course than we had when I first started. In fact, the first course we had was very very lightweight. That developed over time. The NIH requirements, the standards in the area kept going up. Part of it was due to the findings of misconduct in science. Not here, necessarily,

but around the world—around the country. And so, they… they kept upping the ante in terms of the kinds of training that we were expected to provide our graduate students, our postdocs, and even our technicians and faculty. So, I continued to develop that course. I recruited other faculty to work with me in the course. And by that time I was in the administration. I was the Executive Dean for Graduate Studies, and that was part of my responsibility. So, it was a… an enjoyable time developing the course. We actually ended up developing it so that it could be delivered at a distance for those students who were not on campus. Our campus continued to grow and have graduate students on other locations. And we didn't have classrooms out there for this, so we developed using distance technology, and… and allowing it to be delivered on-call, so to speak, for the students. And that has continued to develop that way. So, the program took off from there. Was taken over by others when I left, and, as far as I know, is still doing very well.

John Schleicher: You had a challenge in the 1990s, you were chair of the College of Medicine Curriculum Committee, during a major change of the curriculum in the College of Medicine. Would you tell us about that?

David Crouse: I find it interesting today when people talk about the new curriculum the medical center has just developed. Twenty-some years ago we developed a new curriculum. It's—this is where your administration training comes in. I was a senior faculty member—tenured. Means you can ask anything you want. Say almost anything you want. And our Dean at that time was proposing a new curriculum. Very clinically-focused, in which the new curriculum would integrate the clinical sciences all the way down the first year, all—and basic science would go all the way through your senior year. And a lot of we faculty who'd been doing all the teaching in the first two years were saying, "This isn't going to work." And so, he made a proposal and the

general faculty—had a College of Medicine faculty meeting. And I kind of raised my hand and said, "You know, I… I don't think that's going to work very well. I think there'd be other ways to do it." And so, we had a little back-and-forth during that meeting. Didn't come to any resolution. And lo and behold, the next day, he called me into his office and said, "Are you serious about thinking about the curriculum?" And I said, "Well, I guess so." I said, "If you're going to… if you're going to change it, I think the faculty should have a major say." And he said, "Good. You're chair of the Curriculum Committee." So, that's the way I became chair of the Curriculum Committee. And, again, I hadn't even been on the Curriculum Committee up to that point; and I now was chairing the committee. So, again, that was a big step in administrative issues. But we took the task seriously. And we developed a very different curriculum, which lasted those—almost 20 years. From the early '90s through almost the current year. It's modified over that time. But basically was the same. And we integrated PBL, problem-based learning. We integrated the clinical experience across all four years. We called it ICE. We changed the organization of the courses into topical areas, as opposed to Gross Anatomy and… and Biochemistry. They were divided up so the systems were covered and… and the organs were covered together. And it actually worked very well. It was a difficult change. It was a big transition for the faculty. There were lots of hiccups along the way. And I'm quite confident that the current new curriculum's going to experience the same kinds of difficulties as they make these changes. But, if you're going to change, you just have to—the biggest part of it is commitment. You got to say, "We're going to do it. We're going to make it work." You certainly don't want to hurt the students. You don't want their National Board scores degraded in any way. You want to make sure they're well-prepared, which the faculty were dedicated to doing. So, in

both cases, 20 years ago and today, I'm confident that a curricular change will be difficult. It will be awkward. There will be complaints. And it will work.

John Schleicher: Very good. Were there any accomplishments when you were—as Vice Chancellor or Associate Vice Chancellor in Academic Affairs—any major changes or major accomplishments that you want to tell us about during… during your role in that area?

David Crouse: I think—well, the things that happened when I was Associate Vice Chancellor, part of it arose out of my relationship with the administration and faculty at Lincoln. And I already had that kind of relationship with some of the people at UNO. Didn't know the folks at Kearney. But the year I spent in the Chancellor's office at Lincoln—I got to know the Dean—several of the deans. I got to know a lot of senior faculty. Chairs of the departments. And so, when I came back, it opened the door, in a lot of ways, to begin more open discussions about collaborative projects between UNL and UNO and UNMC. And I think that there was an actual move towards more collaboration at that time. The EPSCoR program, which is an Experimental Program to Stimulate Competitive Research, is actually housed down at Lincoln. But, at that time, it was purely a Lincoln program when we first got informed about. But, as I became aware of what it was, I became more involved. I… I went onto the EPSCoR committee as our representative. And… How can I say—I kind of wedged our way more into that program. We became more competitive in the grants that the EPSCoR program offered, and many of the more collaborative. So, I think it was a chance to open the doors between the campuses more than it had been. And, during that time, I also made more friends with the folks out at Kearney. And some of our students went out there—former students went out there as faculty and are still there as faculty. So, we have made more connections across the campuses. So, I saw more clearly that

the University of the Nebraska truly is one university with lots of campuses. And there are places where interconnections can be made and developed. And we… we did some fairly well back then.

John Schleicher: You've been involved, Dr. Crouse, with an organization called the Nebraska Coalition for Lifesaving Cures. Can you tell us a little bit about that?

David Crouse: The Nebraska Coalition for Lifesaving Cures arose around 1999. If you recall, there was a great controversy back then about the University of Nebraska Medical Center using fetal tissue in research. And that had been done with all the appropriate consents and approvals, but it wasn't made public. Not because we didn't want to make it public, just because it hadn't been. A lot of research isn't talked about in that level of detail. When it made—hit the press, and it definitely did hit the press—it was a headline at that time, huge controversy arose. And shutting down all the fetal tissue research at the Medical Center. Shutting down any—lots of controversial things that might be going on at the Medical Center. And we had a battle in the press. We had a battle at the Regents. We had a battle in the legislature. And Dr. Burnt was the Chancellor at that time. He had just come into the Chancellorship and I had just come into the interim Vice Chancellorship, so I got thrown into this fire at the same time. And we… we spent an enormous amount of time with legislators, with Regents, with the press—members of the press, trying to explain why this is legitimate and eth—ethically-driven research that's fine to do. That has never completely gone away. The argument changed over the years from fetal tissue research, which we successfully defended and kept, to embryonic stem cell research, which came about… about ten years later—almost ten years later. And that arose as a highly controversial area. At that time, I was still in the administration—still in the interim Vice Chancellor role, for

my third time at that time. And, again, we had to defend it with the legislature, with the Board of Regents. And this came up—the bills were proposed. None ever made the floor. Things came to the Board of Regents which were proposals to shut down embryonic stem cell research, to shut down fetal research. And we have managed to defend against all those. During that time, there wasn't really much of a public area that would support the university in these areas. And so, the university reached out to a number of prominent public people and said, "You know, we do good work here. And we know we do good work. And we want you to help us defend the university." That was the origins of, that time, Nebraskans for Research. Nebraskans for Research came to the defense as a public 501(c)3 non-profit. They came to the defense of the university and this research as being ethical, nationally renowned research with great competitiveness and all those good things that mark good research. And they helped us defend it with the legislature, with the Regents. That morphed into the Nebraska Coalition for Lifesaving Cures—2006, I think it was. I don't… don't have the exact year in front of me. About 2006. At that time, we… we wanted to grow the organization and establish a 501(c)3. In addition—a 501(c)4 in addition to (c)3. 501(c)4 is basically a lobbying arm, (c)3 is an educational non-profit arm. Both are non-profit. So, we grew. The organization became larger. That was the year before I retired. I was on the board for the Nebraskans for Research and for the beginnings of the coalition. The day after I retired at UNMC, I became president of the coalition. And that's because the outgoing president was moving to the East Coast. He was a good friend too, but he… he took a job change and moved to the East Coast. We timed it so that the day he left, I started. And it was also the day I retired here. So, I've been president of that organization seven years now—six years now. And have led a good solid organization that does sound financially. We have the support of major members of

the business community. We do all we can to defend the research that goes on here at the Medical Center, if it needs it. Most of it doesn't even require it. But we also realized in that process, part of the problem is science education among students and among the legislatures. Legislators. And among Regents. And it would be wise if we could do what we could to provide additional education in the sciences to those folks. Particularly in the life science and the controversial areas. So, for the past several years we have made it a major effort—the coalition has made a major effort in providing education. So, we support the Sci-Fest program. We support the eighth grade science meets. We support scholarships for students in the life sciences. We support awards to faculty who are doing research—not necessarily anything related to stem cells or embryonic stem cells, or fetal tissues—good research in the life sciences. We support that. And we do all we can to make the public aware that good research is being done at the Medical Center. And it's an interesting area for a career for young people—and that they should pursue it if they can, and if they're interested. We do all we can to help them. So, that's how I became involved and I'm still involved with the Coalition for Lifesaving Cures.

John Schleicher: Are there any… anything that we haven't covered that you'd like to tell us about, Dr. Crouse, from your time at UNMC?

David Crouse: I could make some comments there. [Laughter]

John Schleicher: [Laughter]

David Crouse: No, I think, the… the thing that kept me at UNMC for this long period of time are really the people more than anything else. I developed great collaborations, great friends. My wife and I have continued to be connected to the university in terms that we… we still work with the—through the Faculty Women's Club, which most people don't even know what that is. But

many of the women, both faculty and faculty wives—or spouses, I should say—can be associated with the Faculty Women's Club. They sponsor all kinds of groups—badminton, books, needlework, gourmet—all kinds of groups. And you can look them up on the web if you want to find out more about them. And, even more recently, there's an alumni—faculty alumni group that has developed with time to keep people connected to the university after they actually exit the doors of the university as a full-time faculty member. And I think being connected to the university after your career keeps you alive and well, for one thing. Your friendships don't end, so you continue those friendships. You can send—continue the relationships and I… I still enjoy the Medical Center. I come out for seminars. I do what I can when I can. I look at UNMC Today every day. And I'm out to the library either on the web or here often enough that I still feel like it's home.

END OF INTERVIEW

7/24/2018