

NCSU
Kekas Interview

Q: **Interviewer**
Kekas: **Dennis Kekas**

Kekas: Yes, I could also just say that I started off by being at IBM and then I came here.

Q: Bill is going to get an audio level on your slate. What I would like for you to do is to give me your name and spell it. That is for the transcriptionist.

Kekas: It is Dennis Kekas.

Q: What is your title here?

Kekas: I am serving two roles here at the University, one as Interim Director for the Centennial Campus and the other normal role is as Executive Director of the Network and Technology Institute in the College of Engineering.

Q: The first question is will you tell me a little bit about your academic history and how you came to be here at NC State.

Kekas: I have an undergraduate degree in electrical engineering and then some advanced studies in that same field. I spent my career with IBM. In 1996, I retired from IBM and in 1997 I got a call to come to the university and I have been serving in various capacities since that time. I have both an industry and now an academic background although it has been in the administrative side where I am helping to develop partnerships through the university.

Q: Tell me what you know about the early years of Centennial Campus?

Kekas: As I understand it, in the early years this land was granted through some acts of State, the Legislature ultimately, to take the land that was the Dix property that

was used for rehabilitation as well as for food production for the Dix hospital system. That was really the genesis of it. As I understand it, the thought behind it was that the City of Raleigh, if you went back in time, mainly had the idea that it had this piece of property and asked what we can do to develop it in order to help improve the tax base situation. Later, the State Property Office had some thoughts, I am told, regarding a research park and then along came some of the chancellors, as well as the governors who were involved and ultimately made this happen. There were people like Bruce Poulton, Governor Hunt, followed later by Governor Martin, and in a sequence of stages the land was granted to this amount that we have now, which is in the ballpark of 1200 acres. Not only is this campus the Centennial Campus, but there is also a Centennial Bio-Medical Campus that is associated with the School of Veterinary Medicine here at the university that has a similar kind of grant to be able to do things in a different way through the Legislative freedoms we were given with the Centennial Authority who helped set this campus up. That now has been extended to all 16 universities in the System under the Millennium Act, but this is the only one that is really in active play. So, that is what has happened over the last 20 years. Of course, there is a lot that has happened to steer it and guide it and to create a master plan to see it to the stage we have now, which is very, very substantial.

Q: I am going to go off script a little bit. Something you said made me think of another question. How is this portion of the university and the Bio-Medical Centennial Campus different? What makes them different than the rest of campus as far as what you can and what you cannot do on them?

Kekas: Conceptually, they are the same. The grant from the Legislature to have exemption from the Umstead Act carries over to the veterinary school as well. Now that was a later development and they are just in the embryonic stages in terms of building a similar kind of infrastructure that you have here on this Centennial Campus in that the first buildings going up now could accommodate academic as well as private enterprise type tenants. Now, that said, there is one piece that is unique over there that is not here and that could easily happen here as well as at some of these other entities over time and that is on August 24, they initiated a thing called IAMS Imaging Center, IAMS being a division of Procter & Gamble that makes pet food. They have a Magnetic Resonance Imaging Center for diagnostic work on small and large animals. The unique part of that is that it is housed in an appropriated building, which is not normally the case. You very rarely, at least on this campus, have an entity that is a private enterprise, if you will, incorporated in the confines of an appropriate building. When I say appropriated, it means state appropriated funds as opposed to private funds or university bonded buildings where funds on their own as university bonds. It is not a big, huge thing in the sense...space wise it is a relatively small area, but it is a very important piece of diagnostic equipment. It gives the School of Veterinary Medicine an edge that very few schools like that have. I think there are only two or three in the country that have this capability or will have it. It is a great partnership. It is an example of the partnering between industry and the academic units to achieve a win-win. They get the win-win because they have people come there and they have their brand recognized and, hopefully, they will make some

money that pays off the operation. But, it is mainly brand recognition as I understand it. The university gets tremendous benefits from the research because the students have access to the databases; they can participate in the diagnostic work there. I think that is an example of what you really want to happen, to have this \$3 million instrument that you might not otherwise have been able to afford by having this partnering relationship and finding ways to work within the rules that you have to follow as part of the University System to make it happen. That is a long winded discussion of what happened, but I think that it is a unique thing. Can we do that in another building here on campus, engineering or textiles? Yes, we don't normally do that because there are a lot of code issues that you have to be concerned with, firewalls, for example, that you might not otherwise have to deal with. There is an example where it is a little bit different thus far, but it doesn't mean that it has to be different.

Q: So, normally we don't have private companies coming into buildings that State money built?

Kekas: That is correct.

Q: So the difference here on Centennial Campus from Main Campus is what exactly?

Kekas: First of all, I should clarify that we have companies and agencies that are not academic, if you will, which utilize our facilities. If you go to the Engineering Graduate Research Center on Centennial Campus, you will find companies using our specialized facilities. It could be renting time with some help from the services group there to use the scanning electron microscope or mass spectrometer or some other equipment that we might have, clean rooms, for

example or lab facilities. They do that on a service basis which is different from being a tenant. That is what I am trying to delineate. So, we have outside entities who interact inside the confines of appropriated facilities because it is part of the partnering. But to have them housed inside there and paying rent as a tenant, when you start mixing and have multi-use tenants, you have to be concerned with firewalls and make sure that you comply with all the code restrictions. In other words, if you had some entity inside a building and you didn't have the proper isolation for that tenant who could create a fire or some hazard, you want to be compliant with all of the codes whereas a single tenant would not have to do all of those things. Those are the things that you have to be concerned with. In fact, we have to be concerned with that in other buildings as well. We refer to some of the special up-fit that is required for multi-tenant usage that are real estate, but there are also things that you have to be concerned with from a legal standpoint.

Q: So what do you think is the position of the Centennial Campus in the overall life of the university right now?

Kekas: I think, first of all, that we have a real diamond. It may still be a diamond in the rough a little bit, but it is definitely a diamond and it is a jewel that very few people have. We get inquiries...I have been in this role as interim director for about six months and hardly a week goes by that we don't have someone asking how this happened or how did you pull this off. No one person pulled it off first of all in its 20 year history. Charlie Leffler and I were having lunch one day and we were talking about some of the issues as well as talking about what we were going to be as we go forward and we conjured up the term 20/20 Vision. Looking

back 20 years and looking ahead 20 years was a little play on the visual thing. As part of that, you start to get into asking where are you going to go from here and what are some of the things...and where are we now. This is what your question is. If you look at it in terms of the build out, the infrastructure, the physical facilities and everything, we are probably one-quarter to one-third of where we would ultimately like to be. Now, that is a big quarter or third because there is a massive amount of facilities here. I think right now we have 1.6 million square feet of space soon to be 2 million. I think the ultimate build-out, if I understand the Master Plan concept, which is subject to change, is about 9 million.

Q: So where are we now?

Kekas: Right now we have in the ball park of 5,000 to 6,000 people on campus that is a mixture of academics, industry, and agency and underneath that staff and students and so forth. That is going to change a lot, by the way, coming up very shortly when the new engineering buildings come on line. You may be aware that we are in the first phase of bringing the College of Engineering on to campus. Ultimately, there will be two colleges here. One is already here, the College of Textiles. I venture to say it is the premier college of textiles in the world. Soon, we will have the College of Engineering, at least a portion of it. The first phase will have Chemical Engineering, Materials and Electrical Engineering and Computer Science. When they come, they will bring 3,000 people here starting early next year. So, the complexion of campus will start to change rather dramatically from being basically a graduate level campus with industry and agency people interacting to certainly now having an undergraduate component.

It will be much larger than it has been in the past. The College of Textiles, of course, has been here but it is a smaller school. The College of Engineering at NC State is the largest college and it is a very large college of engineering compared to other colleges throughout the country. We are privileged to have that. They are going to be moving here and that is going to make a dramatic difference on growth and will probably have a very significant impact on growing our partnerships. To me, the thing that delineates Centennial Campus from a research park, and I have had occasion to go and speak with professional groups and so forth, is that we are on a campus; we are next door to the campus. We are not a campus related...in some cases, universities will have a park that is maybe 20, 30, 50 miles away from the hub of activity. Here it is co-mingled together. I think that is a fundamental difference. My predecessor in this job here always referred to partnering as a contact sport and there is a lot of truth to that because to the degree that you get people to interact and spontaneously see each other and start to form relationships, that is when the magic happens. It is something that you have to set the stage and the environment to encourage that to occur. It is not something that you can legislate or force; it just has to be a naturally occurring thing for people to get together. Now, all of that said, as we look forward from where we are now, we have talked about it in terms of space. Right now we have about 62 companies whether they are small, one-person incubators or the world headquarters for Red Hat on campus. As we go forward, I think that we will continue to grow those partnerships. The quantity is not as important as the quality of them. We have discussions going on right with some very large entities

that could have a very strong presence that could really, really be in line with the research mission of the university. Those are things that we have to grow in the future. I think the focus, personally, needs to be on innovation and I would like to see us known as the crossroads of innovation. We are taking steps to try to encourage that. We are going to start a series called, I think we are going to call it this, the Innovation Connection Forum where we will encourage people from the outside to come on campus on a particular evening for an hour or so and we will have certain elements of our technologies and have people speak. Maybe someone will get on the podium for 10 minutes to talk about their business plan or their new idea or some service that they have in mind. This will be open to the community at-large. We would encourage people, not only from the university, but venture capitalist, patent attorneys, those types of communities and we would encourage people from our sister universities in the region like Duke and UNC Chapel Hill and North Carolina Central to come here and participate in those activities. The idea is to create this go-to place where you can see and help the whole thing of incubation and innovation. I personally feel very strongly that innovation is the engine that pulls economic development. That is a long-haul view. To the degree that we are successful in encouraging entrepreneurs, whether it be a graduate student or a faculty member or whoever it may be on campus, to go out and create a small business and have it grow and eventually create jobs elsewhere within the State, region, and the country, then I think that we will be hugely successful. To do that, we have to do a lot of different things. Some of the things we do extremely well and some we don't do as well. We have to be

forthright about that and try to step up. Just recently we found that some of our space for incubators was not as competitive as it should be and we have taken steps and had good support from the administration to fix that. We are fixing that real fine. Sometimes you have to change tires at 40 miles-per-hour to make things happen. I think that the fundamentals that we have here are what is really important. Whenever these entities I mentioned come out to visit us...whether they be Huntsville, Alabama who is coming in the middle of the month to have a second visitation. We have had calls from John Hopkins University; we have had calls from the City of Hope in California. These are ones that just pop to my mind that came recently. They are all trying to figure out the magic and asking why this model works and what would we do differently if we were doing it again. How did you get here from there? How did you get here from there is a testimony, frankly, to a lot of visionary people like Claude McKinney, Bruce Poulton, Governor Hunt, Governor Martin, Joe Henderson in the State Property Office. Chancellor Monteith had a role in making sure that we had programmatic connections. Another distinguishing factor of the Centennial Campus is that we insist that anybody who is here have a programmatic connection with the University. That is loosely defined, but we do that. It is what the partnership office is all about. If we see a prospect, they can come from many different sources, that is interested in coming here and participating on the campus, whether as a tenant or otherwise, we try to ensure that they have a connection with the mission of the University. We are a land-grant institution. Ultimately, our success is our ability to transfer our technology. Our best transfer

mechanisms are the persons we should be serving most, and that is our students.

They are our biggest asset here and we are very fortunate to have a very talented group of young people coming in and a great demand for them to be here. That is what makes it happen. That is part of the vision I see going forward.

Q: Well, the next question is where do you see us going? Where do you see us being in 10 years? Where do you see us being in 20 years?

Kekas: It is hard to put a time-line on it. If we talk with some of our partners, partners in this respect would be the people who help develop the real estate and infrastructure...I hate to put a lot of emphasis on real estate, but it is an underpinning. If you don't have it or if you don't have the buildings and nice facilities, you can have all of the other stuff, but...Some of them would like to see this thing ramp up a lot faster; others would like to see it at a steady-as-you-go pace because we don't want to get too far ahead of ourselves. We want to make sure that the model is always working in the proper, intended way. Sometimes you get a little carried away or a little too ambitious or rambunctious. I think the truth is somewhere in between and how does that translate? I think if you look at the Master Plan and what I have been told, and I don't profess to have all of the answers to this, the long term 35 to 40 years for this campus of which we are roughly at the half way point now, is about 35,000 people here. Now, that would be all people, students, faculty, administrators, companies, industry, governmental agencies, and so forth. We are talking about a techno polis as it is sometimes referred to where you can work, live, and play. We do have residential units, town homes and so forth that you can purchase and indeed live here. This model

has a lot of uniqueness. That gets you into discussions about certain amenities that you need to have. I don't mean this as fanciful amenities, but one of the things we desperately need here and that I have seen at other campuses, is a hotel and conference center. Why is that important? Is it just because we want to have people here to see the lake and golf and walk around? I think it is important because we want to have a place to have meetings, conferences where professional groups can meet with federal agencies, state agencies and companies and all those different people so that they can have a seminar or a conference right in the middle of campus. It is beyond value. It will dramatically increase our ability to increase this programmatic and partnership connection over time. Enablers like a golf course is a key to making that whole package come together. Ultimately, somebody has to pay for all of this and we have to find a way to make that work. We are on a fund-raising campaign now to get the golf course. A golf course is a lot more than just an amenity to make the hotel/conference center occur. We jokingly refer to it as our turf grass research facility. But, the fact is that we have a very strong and very successful turf grass research program and golf is a big portion of the tourist attraction in this State. You only have to go down to the Myrtle Beach area, for example, to see those hundreds of golf courses down there to understand that. It is a big deal. Turf grass research is a big thing. We have golf teams, for example, in our conference. We need it for lots of reasons. I see those as some of the amenities. We have started construction on the new Alumni Building, which is going to be a showcase facility. We have the Friday Institute, which is an extension through the College of Education to

provide innovation to teaching and middle schools and so forth, which will be located adjacent to our Centennial Campus middle school which focuses on science and technology as I understand it. That is under construction as well and that is a very, very important piece of this thing. I would like to touch on that for just a moment if I could. I am a strong believer that for our State and our region and our country must be competitive in this global work force that we find ourselves in these days. The forces of globalization are so powerful that you can't change them. So the question is how we continue to lead and to be ahead. It gets back to that word innovation. Well, we do all of these things, but the raw feed stocker if you think of this as a kind of factory, in my judgment is your K-12. And to the degree that we inspire young people, young girls, young boys to get into the sciences and the stuff that we specialize in here, the life sciences, engineering and so forth, we can involve them in a very strong way so that they are really excited about it. They are going to be the ones who feed the graduate institutions like NC State. Having them on campus is just a small subset, but to me it is very symbolic and very important. I think you have to take a holistic view of all of this. I will use a term from my old IBM days, an end-to-end business process. I don't like to put it in business terms but you have to look at the end-to-end. A lot of people get concerned these days about off-shoring of certain jobs that become commoditized and go offshore, and they want to know what my answer is to that. I say, personally I don't think you can do it with regulation, there may be some place where that is appropriate, but I think the ultimate it is important that we are the leaders and we are one step ahead of the

rest of the world. You then look at what you are doing today with people coming out of the universities and partnering, but you also look at what is coming up the ranks. As the baby boom starts to hit us and the demographics and shifts start to manifest themselves, there will be a lot more people aging out. What are we going to do to encourage those people? I think that is part of what Centennial Campus is all about. I give enormous credit to the people who had the guts and vision to see that all of those pieces are in place on this campus. That is exciting to me. I don't view myself as a traditional academic. I am certainly not a research professor, but I have been immersed in this and I have become a true believer. I come out of industry, but this is exciting.

Q: That is it for my questions so if you want to...

[END OF SIDE A — BEGIN SIDE B]

Kekas: Well, if I could continue some of the discussion that we had on the amenity thing, one of the things I didn't mention was that there is a great need for gathering places. I did touch on one thought and that was this innovation/connection forum. I view those as tools to set the stage. One of the things we need badly is a place for people to eat. Sounds kind of mundane and routine and something that we should have, but we are at that critical mass stage where we have enough people to support nice restaurants and so forth. As the students come on campus it will help a lot. There are plans to have a nice restaurant on the campus, certainly one that would be in the form of a nice deli and it will be in a court area. It will be in the Venture Complex. That should be coming on-line within the next six months. I hesitate to put an exact date on it because we have had some false starts. That

will be important. We will have some outside seating as well as inside seating. The idea is that people can sit down and then bump into each other and have this dialogue. There will be other restaurant-type facilities over time. At some point, we will have a hotel and conference center and that will bring an element of those, maybe a little more upscale. There will be some kind of services like that in the Alumni Center building and there are some smaller entities like coffee shops that will be in the College of Engineering building and new complexes that are on the way. Some of those are already defined and established and over time I think we will go beyond that. This is just some of the current thinking. It is important to have places where people can just gather naturally. Some of this happens anyway irrespective of that because you have people co-mingle. One of the things, back to the park as a contact sport, is that if you go in Ventures I, II, or III buildings, you will find computer science and electrical engineering labs and so people are next door to each other. You may have a company right next door to one of those units; it may be a networking company, for example, in the information technology area next door to a group of master science students working on their science and computer networking. Those kinds of contacts happen in the hallways and so forth, but to the degree we can have some broader facilities like restaurants and so forth, it will help a lot. I don't know whether you picked up on the fact that Centennial Campus was actually set up in technological neighborhoods. There is one that focuses on materials and manufacturing processes and another one on information technology. The life sciences are another one and eventually there will be one in environmental sciences. There is

another area that is nano-technology, which is a big thing. Those all fit in some of the major themes going forward. When Dr. Marye Ann Fox was at the University early in her six years, she spent a lot of time with the teams and asked what we want to be as we go forward and what is our focus. Some of those things I just described were part of that discussion and the campus is lined up to sort of mesh with that. That is a moving target, by the way. Something may come up new that we have not thought about yet; it may be hot tomorrow. We will have to address these things as we go down the pipe. There is another thing I think is important. This is back to the subject of incubation. I like to think of the whole campus as an incubator. Now, within that incubator we have a laboratory incubator and we have an office incubator and so forth. Our lab incubators seem to work quite well because they focus and are high demand. Our office incubator...I mentioned earlier that we had to take some steps to improve the financial structure to make it a little more workable for those tenants who may not be as financially well off as to afford a facility. Those things are being addressed. We also need to provide services and one of the things that we will be embedding in the incubator will be the small business technology and development center, SBTDC, which is an agency in the university system at-large that helps small businesses. They are going to be housed in an incubator so that will be a natural thing and that will be a great asset to the small start-ups. Hopefully, those start-ups one day will be the next CISCO or IBM. That is what you would like to see. We are currently having a discussion and will probably implement within a six-month period a service that will be free to those people through a pilot program in

partnership with the Microelectronic Center of North Carolina to offer grid connections and grid services. They are going to call it the Start-up Grid for these kinds of people. The idea behind the grid is that you have access to enormous computational storage power, think supercomputing if you will, that you would not be able to afford. Let us say that you are a small start-up and you are working on a sequencing problem that requires a lot of computational ability to be able to have access to that grid and to be able to run that problem so instead of taking you days and weeks to do the problem, you can do it a number of hours. That is a big step forward. Those are some services that we hope to layer in there to try to continue that. The Industrial Extension Service is helping to run that right now. They have a lot of other programs. We are trying to partner with some of the professional associations, for example, hosts on campus associated with the incubator may have a Saturday morning session about how to write a business plan. To me, this is what you need. I have had discussions with several of the leaders in the region and their point of view is that the big challenge for entrepreneurship is that they come up with great ideas, but they spend 80% of their time doing something other than that idea. They have to try to find money, to find services, to find office space and all of these different things. We need to get the 80-20% rule reversed perhaps. One of the big ones that we don't have well established is how we get more access to capital. That is a chronic problem in the region. There are a lot of people talking about what to do to attract more venture capital. These are the people who invest in these ideas to help make them realities. So, we are fortunate that we have some entities already in place here

like the Kenan Institute, which has been very philanthropic in helping some students with grants in the form of gifts. One of the predecessors here, Dick Dougherty, through Progress Energy has set up a small fund that will be coming together and helping out a little bit in the next year or so. There are things like that, but what we are also hoping is that more people from some of the places, the corridors that we know of as hotbeds of innovation and technology, like the Route 128 corridor around Boston, Silicon Valley, and other areas of the country will see fit to invest more of their capital here because we think we have just as many smart and talented people and nuggets of great technology within the confines of the university as anybody. We are not at all ashamed of what we have. We just need to be able to have more financial support for those things to mature and go through the tech transfer process. These are just some other thoughts that I have had as we go forward. If I step back and ask where we are, I think we have come a long way. We have something that we should be extraordinarily proud of and we should never lose sight of that. We should be thankful to those people who were pioneers because it was not easy to get here from there. There were a lot of times when there were some ugly editorials in the paper about this failure that was referred to as Centennial Campus. I don't see those articles anymore because it has become very successful. But anything worth doing in life has a price to be paid. There is a certain amount of risk and effort. I hope we always remember to thank those people who really, really helped to make it happen. We touched on a few of them, but sometimes the danger is that you forget some people who were extraordinarily important. I

apologize if I didn't know who they were or omitted their names, but they really helped create something very powerful for NC State. I think as we go forward if we don't rest on our laurels...the enemy of success is success. You have to remember that. Always be a little bit paranoid as Sandy Grove of INTEL would say. I think if we take that attitude and we take what we have here and start to think of new ways and bold initiatives and so forth and think out of the box and not just think internally of NC State but bring in the community leaders, the business people, the agency people, bring in our students, our faculty, our administrators to start revising where we are going. Master plans are great, but they are only as good as you update them because times do change and you have to reflect that. You do sometimes have to change tires at 40 miles-per-hour. So, that is my view of where we are at and where we are going. I am privilege to have the opportunity to serve here for this short period of time.

Q: Great, that's perfect. Did we miss anything?

Kekas: I think we hit most of the ones.

[END OF RECORDING]