

Oklahoma Innovations Radio Show

Air Date: May 30-31, 2015

Guests: **Carl Edwards**, Oklahoma Bioscience Association

>> From the OCAST Radio Network, this is *Oklahoma Innovations*, a weekly science and technology radio magazine, brought to you as a service of OCAST, the Oklahoma Center for the Advancement of Science and Technology. OCAST is the state's only agency whose sole focus is science and technology. The OCAST mission is to identify and fund promising research and technologies that allow Oklahoma to compete in a global market economy from our own backyard. This program features some of Oklahoma's most gifted scientists, inventors, entrepreneurs, manufacturers, educators and business leaders who all have one common goal: developing technology based economic growth for all Oklahomans. Now, here are your hosts Gary Owen and Tessa North.

[Music]

>> We welcome you to another addition of *Oklahoma Innovations*. Gary Owen and Tessa North, we are always excited to be a part of the, your weekend because we never know until we find out from our producer who we are going to interview. Sometimes they're celebrities, sometimes they're dignitaries, sometimes they're prominent scientists and researchers or innovators. This week we are honored with the presence of Carl Edwards, a partner of Price Edwards & Company; the largest Oklahoma based commercial real estate service company, but he is also chairman of Presbyterian Health Foundation, a local foundation that owns and operates a hundred million dollars in bioscience research park facilities at OU Health Center and well, we can cover that because it's really a lot of stuff has progressed.

>> Yeah.

>> This is bio, so -

>> And I think that Carl is going to be a great guest because he seems to sort of really have his thumb on the pulse of Oklahoma City.

>> He does.

>> So he'll have some good information for us today.

>> And he has pulse on bioscience in Oklahoma and what that means is big business to the state of Oklahoma. Find out more about that here shortly. Alright, so you have some preshow stuff we want to talk about. You got a calendar for those who need to know about these events.

>> Yep, we have some upcoming events that might be of interest to our listeners. As we all know summer is fast approaching or actually it may be here by now for most schools, for most students. So if you're looking for something to keep your students occupied this summer while they're out of school, you might consider checking out the Science Museum Oklahoma summer camp that they'll have starting on June 15. They will host six one-week summer camps for students in grades one through six and during these camps, students will have the opportunity to participate in hands on experiences and to explore the museum. The cost per week is \$250 for non-members, but if you are a member you get a discount. So you should call 405-602-3760 to find out more about the discounted rate for members and as well as finding out more about enrolling in these summer camps. As I mentioned, those will start on June 15 and there will be

six of them. Also coming up, a couple of months away we have the Oklahoma Technology Showcase, which will be taking place August 26 at the NSU campus in Broken Arrow. During this showcase, eight Oklahoma technology based companies will deliver TED like talks. So short, high impact talks about their innovations, the lessons they've learned, and the challenges they faced on their journey. These are going to be companies that run the gamut from startups, small two person startups to big companies that have been around for generations in Oklahoma. Anybody who is interested in possibly partnering or investing in these companies or anybody who just wants to find out a little bit about some of the cool stuff that's going on in Oklahoma is encouraged to attend this high-energy event. As I mentioned, it'll be August 26 at NSU in Broken Arrow. You can check out ocast.ok.gov to find more about the agenda, the companies that will be participating as well as find the link for our registration.

>> Awesome and this week's Oklahoma, well actually innovation in history. I started to go with the Oklahoma Spot Light, but let's do your innovation history first.

>> That's right. In May in 1961, the first American astronaut made it to space. Allen Shepard of NASA was on board Freedom 7, which was launched from Cape Canaveral. This flight took just about 15 minutes and reached an altitude of 115 miles. During this historic flight, Shepard was able to test the Freedom's altitude control system and adjust its orientation, orientation for atmospheric entry. He was also able to test the retro rockets, which ultimately would return missions from orbit. They weren't functioning at the time of this first launch, but he was able to test them. It was, this flight was considered a technical success and the mission concluded when the spacecraft landed by parachute in the Atlantic and Shepard and the Freedom 7 were lifted by helicopter into awaiting aircraft carrier.

>> Is that one of those [laughter].

>> I could only imagine.

>> And the Oklahoma Spot Light this week.

>> So our Spot Light this week actually goes along fairly well with what we're talking about without guest today. We all know that Oklahoma has a great, Oklahoma City in particular is great place to start a business, but a new report indicates that our city is actually rivaling Silicone Valley in terms of tech talent. Oklahoma City is recently ranked in the top 50 in tech talent markets according to a CBRE research report. From 2010 to 2013, Oklahoma City saw a 39% growth in technology talent, ranking it as one of the strongest growth markets in the country. Thanks to our strong energy, aviation, aerospace, and biotech industries, there was a large pool of talented high skilled employees who are entering Oklahoma City's work force each year. So while our city made its debut on the top 50 list this year, we're poised to ascend the ranks of the technology markets thanks to our strong and growing industry sectors and to the talented people that are able, that are working to recruit these talented worker -

>> Easy for you to say -

>> Our city. My goodness and I think our guest today is going to be able to talk a little bit about this because he, as we mentioned, is very active in all aspects of Oklahoma City, but in particular the biotech industry. He can give us a lot of insight about that.

>> Yeah if you're not a novice of science terminology in general, but you probably hear that word bioscience or biotech, our guest Carl Edwards who is chairman of the Presbyterian Health Foundation, is the gentleman and the, probably the best way to lead into him is to quote the OK

bio leadership award, bio that was read recently at his presentation. The OK bio leadership award hall of fame recognition and I thought reading this was probably the best overview of Carl, stipulating that he's a big gun. There is no one more dedicated to the growth of Oklahoma's bioscience industry than Carl. When called upon, he rolls up his sleeves and gets to work. He's literally been involved in all aspects of Oklahoma's bioscience industry development for many years. His list of organizational leadership accomplishments is a testament to his commitment from his capacity is chairman of the Presbyterian Health Foundation to his top leadership positions with the Oklahoma Bioscience Association, Oklahoma Health Center Foundation, Oklahoma Medical Research Foundation, i2E, Greater Oklahoma City Chamber, and Oklahoma Business Roundtable. He's also a true heavy lifter in the development of Oklahoma City serving as campaign chairman of the United Way Metro Oklahoma City, past president of Leadership Oklahoma City and past chair of the Oklahoma Metropolitan Area Public Schools Trust, just to name a few. He's founder partner in the commercial real estate firm Price Edwards & Associates, the largest Oklahoma based commercial real estate service company. Because of his diverse background, Carl has been invaluable to Oklahoma's bio community. He has attracted businesses to the research park and has always been there to help bio companies in their time of need. Carl is a selfless leader who always places the mission and goals of a project ahead of any recognition. He listens more than he talks, I hope he does better than that on this show and he is an amazing facilitator who can bring a diverse group of people together to get work done. What a great privilege it is to have Carl Edwards as our guest this week and we have a lot of learn about bioscience in Oklahoma and Carl, what a great pleasure it is to have you on the microphone. Welcome to the program.

>> Thank you. I look forward to working with you all today.

>> I hope I didn't embarrass you too much by reading that, but that was important to get out there because I didn't realize you're a busy man and you have been a busy man. You serve on a lot of boards.

>> Sometimes it's hard to say no.

>> Yeah it is. I know and that's what makes individuals like you so special. Tell us a little bit about you. Now, are you a native Oklahoman?

>> I grew up, I was actually born in Oklahoma City, but I grew up after the age of six months in Aberel, Texas.

>> Okay.

>> Went to the University of Oklahoma and then graduate school at the University of Texas and got an MBA and moved to Oklahoma City in mid-1972 and have been here ever since.

>> So what attracted you to the bioscience industry?

>> I was asked to go on the board of the Presbyterian Health Foundation in about 1994 by Stanton Young, the chairman and Doctor Michael Anderson, the vice chairman and because of that I was able to start attending meetings where bioscience was discussed before anybody knew what bioscience really was -

>> Right.

>> I was lucky enough to be on their grants comity and although I couldn't pronounce most of the words they were talking about, I was able to kind of see where money was being spent to

help grow the OU Health Center. So that's really kind of how I got involved in the bioscience world.

>> In a minute and a half we have left here, oh excuse me, we've got a couple minutes left. I'm sorry. Tell us about the history of the Presbyterian Health Foundation Research Park and how that all happened.

>> Okay, the research park was actually put together one lot at a time, 17 acres, by Stanton Young and members of the Urban Renewal Authority and members of the Presbyterian Health Foundation board of directors. It was put together with the plan of doing a research park begun back in the 1980s and the park was actually begun about the time I went on the board in 1994 and after a number of years of building it out to the point that we have the buildings that we have here. At this point, we decided sell the research park to the University of Oklahoma and get back into the grants business because most of our grant money was going to build buildings instead of making grants for a number of years.

>> When you look at the employment and the new companies that have evolved out of that park, it says a lot about the leadership and the vision that many of the investors in Oklahoma City and the surrounding areas have.

>> That is correct and I am so pleased to have been able to be a small part of it. Stanton Young, as many people know was basically the father of the OU Health Center and one of his big goals was to be able to create businesses around the biomedical, bioscience business and make companies grow from that and this research park was the fulfillment of one of those dreams to have a place for those different companies to grow and expand and flourish.

>> So now that PHF Foundation is out of using grant money to buy buildings, who applies for the grants that you guys are actually able to give out now, which is an awesome opportunity by the way.

>> Well we have a, we actually have a grants process going to the Presbyterian Health Foundation's website and we have a lady at Presbyterian Health Foundation who reviews those grants and goes back to the various requesters and gets additional information and then we have a grants comity, which has a sub comity of scientific people who can review the grants and tell us whether they think they're worthy of our consideration. Of our 160 million dollar endowment, we will be giving about eight million dollars away and 90% of that money is earmarked to go for the OU Health Center for various requests throughout the OU Health Center and the other money will be going to other grants within the community that will be called community grants.

>> Awesome. Are these grants for, are they grants for research projects or more for like equipment or improvements or things like that?

>> Good question. For years the grants were going to build for equipment and for endowment chairs to bring people in to OU. As time has passed, there seems to be a movement that need, a group that needs the money or sometimes the scientists who are doing research and coming up with new inventions, etcetera.

>> I'm going to stop you right there. We've got to take a little break. We're talking with Carl Edwards and he's the chairman of Presbyterian Health Foundation. More to come on *Oklahoma Innovations*.

[Music]

>> Pancreatic cancer is the fourth leading cause of cancer deaths with a median survival range of only six months. As an oncologist, I see far too many families suffer from the effects of this terrible disease. We need better treatment options for patients.

>> With the support of the Oklahoma Center for the Advancement of Science and Technology, the researchers at Core Biotechnology have what they hope will eventually be a treatment, even a cure for pancreatic cancer. They have identified a protein, that if blocked, may prevent tumors or keep them from growing. With help from OCAST and i2E, the team at Core was recently awarded in SBIR research grant to enable them to continue their research and move closer to a treatment for pancreatic cancer. If you're a researcher or a small business in Oklahoma and are considering applying for a Federal SBIR funding, contact OCAST toll free at 866-265-2215 or visit us on Facebook or our website at ocast.ok.gov.

>> Now in its nineteenth year, this is *Oklahoma Innovations* on the OCAST Radio Network.

[Music]

>> Over the last decade, Presbyterian Health Foundation developed the Presbyterian Health or PHF Research Park, which contains 700,000 square feet of wet lab and office space and provides a place for researchers to translate discovery to solutions putting science to work solving a specific human health need. Following the 2013 sale of the PHF Research Park to the University of Oklahoma, the foundation has returned to focusing its efforts on supporting scientific research and medical education at the Oklahoma Heath Center campus.

>> Before the break we were talking a little bit about the grants that PHF gives out and you were talking about how there might've been a shift recently from giving out grants that were more to fund endowed chairs to maybe grants that are a little bit more research focused at this time. Is that correct?

>> That is correct. The jury is still out as to where the focus of our grants will end up, but it's my opinion that there are a number of opportunities for us to help startup companies, help researchers who are working towards startup companies in ways that we did not do before we built the research park and so instead of maybe helping endowed chairs get funded, we may be actually helping researchers do their research during a time when maybe NIH funding is not available or other sources of funds.

>> That's so important right now, I think everybody is probably well aware that the Federal Funding has really started to dry up. So any opportunities that local people have to receive research funding, it's really outstanding. When we think about the research grants that you guys are funding at PHF, is that, are these grants do they have like a commercial aspect or potential or is that something, are they, are these grants geared toward being like an economic development tool? Or is it really just a fund research at this point or early research?

>> Well the grants are all given to researchers and people that are working with grants to build something of value to their organization. Hopefully those grants and those discoveries and those companies that come out of those research efforts will become economic development generators because obviously they hire very intelligent people with good salaries and it's the perfect kind of diversification we would like to see happen as we are so concentrated in the oil and gas business at this point. So yes, we do believe that there will be some economic benefits. We don't actually invest in those companies once they are public companies because we're primarily giving to non-profits.

>> Okay, very cool. Now, one of the other things that we wanted to touch on is that you are actually a part of the planning comity, I guess, might be the wrong term for this, this new innovation district idea that's come up here in Oklahoma City. Can you tell us, first of all, what your involvement in that is and then maybe tell us a little bit about what the innovation district is going to entail.

>> Yes. I'm on the planning comity for the innovation district. We are still learning what that means. We are going to be signing a contract with a consulting firm that's national experience in innovation district is significant and we will be learning more about how they look at our area that could become the innovation district. The innovation district that we see in our early discussions is a place for people to work, live, and play and be with other scientists, other researchers, and be able to, you know really see something grow sort of like Brick Town has done with other types of businesses.

>> Right.

>> We feel like that the need is there. It doesn't have to all be bioscience. I mean evidence to the fact that GE has located right here on the Health Center campus, in effect -

>> Exactly.

>> The School of Science and Mathematics as well as other non-bioscience type companies are starting to look in this area. We hope to see a big diversification of companies here and we home to see this become a real center for scientific research and businesses to, that respond by that scientific research to really make it their home.

>> Now there's been some major cities already that have been successful with these kinds of districts, haven't they?

>> Yes, there are three or four of them around the country that we've looked at. We're going to go look at some efforts in Philadelphia in the next month and there's been some in Saint Louis and other places as well, but it's pretty new. We would be the fourth or fifth in the country if we were able to get it going and nobody knows how long it's going to take to really help make it happen, I mean the research park here took a long time. The health center's growth through the point that it is today took an awful long time, so we are not going to necessarily hold our breath. We're going to work real hard to try and make it happen though.

>> Yep.

>> I guess the beauty of it is that in the downtown Oklahoma City area and I would imagine even Tulsa has the opportunity of the land is available to build an infrastructure like this called the innovation district because Tulsa has its own pretty strong science based too.

>> That is correct. I'm not sure what they're thinking at this point, but from our standpoint we believe that this has the opportunity to really become an add on, if you will, to our downtown, redevelopment in downtown growth.

>> And I know that as this evolves more and more people would like to be able to walk, ride the bike to and from work and make it its own community, sort of and I guess a spinoff of that means more retail shops and service businesses building on into that. I mean that's the vision, right?

>> All correct, yes. That's what we hope we can do with it.

>> And all that means folks is jobs and wealth, more economic wealth for the state of Oklahoma, which is all of this is about and this is why science and technology, this is why we do the show to show you the importance of how science and technology can just have a dramatic impact in the state and thankfully when OCAST was evolved we've already shown that oh look at all the companies that have grown here, that have been and look at all the talent we've recruited outside of our state boundaries.

>> That is correct. In fact in a big way, you know there's 17,000 people working here at the, in what would be called the innovation district right now and that doesn't count any of the people that are being hired at GE, who are hiring, you know highly paid engineers. But there's companies that do manufacturing of drugs and stuff. Cytovance, which is a very successful company that was started here, there's other research companies doing sorts of, all sorts of bioscience efforts.

>> Carl Edwards is our guest, he's chairman of the Presbyterian Health Foundation and we're getting some interesting news and a little bit of vision of what's in store for Oklahoma City and how it's going to benefit you too in other areas of the state. More to come on *Oklahoma Innovations*.

[Music]

>> If you enjoy listening to this program, tell us, better yet like us on the OCAST Facebook page. There's more *Oklahoma Innovations* to come on the OCAST Radio Network.

[Music]

>> When I invented my new product, I faced a lot of challenges from securing capitol to recruiting qualified employees. It's a very complex path from innovation to the marketplace and I needed some help navigating the process. The Oklahoma Center for the Advancement of Science and Technology and its strategic partners, the Oklahoma Manufacturing Alliance and i2E help entrepreneurs. They support existing and startup companies so they can succeed and create jobs, increase per capita income, and grow the state's economy. In its 26-year history, OCAST has funded nearly 2,500 research projects and provided support to hundreds of Oklahoma based companies. The investments made in these businesses yield high returns for our state by strengthening and diversifying our economy. Advancing innovation is investing in a positive future. That's what OCAST is all about. For more information call OCAST toll free at 866-265-2215 or visit us on Facebook or our website at ocast.ok.gov.

>> I'll graduate from college soon. I wanted real world experience that would make me stand out to potential employers. That's what I like about my internship, it's preparing me for a competitive job market.

>> With the support of the Oklahoma Center for the Advancement of Science and Technology, more than 500 Oklahoma students have interned with science and engineering companies. OCAST's intern program helps students connect with mentors, operate instruments not available in the classroom, build confidence, and gain practical experience.

>> The OCAST internship gives me the opportunity to put into practice what I study in the classroom. It's a great learning experience and a chance to work with top-notch professionals.

>> Internships play an important role in connecting Oklahoma's brightest students to quality technology jobs in Oklahoma. Creating opportunities, that's what OCAST is all about. For more

information call OCAST toll free at 866-265-2215 or visit us on Facebook or our website at ocast.ok.gov.

>> Research and development, technology transfer and commercialization creating high paying jobs in Oklahoma is what OCAST is all about. This is *Oklahoma Innovations* on the OCAST Radio Network.

[Music]

>> Welcome back to *Oklahoma Innovations*. Thank you for joining us this weekend. We are delighted to have Carl Edwards who is chairman of the Presbyterian Health Foundation and he is also, he's been a very successful commercial realtor with, of course, being a partner of Price Edwards & Company. There's some interesting statistics related to wages in Oklahoma, Oklahoma City. When you talk about the difference between the average yearly wage in Oklahoma City area is what 37,700 compared to 45,439 for employees in the bio sector or 58,300 for those working in drugs and pharmaceutical sub sector biotechnology. That's significant business in Oklahoma, great salaries, high paying jobs.

>> Yes and we hope to be able to continue to see those numbers grow and by bringing in more people with the ability to be able to take companies from the in effect the laboratory to the, to Wall Street, of you will. The Oklahoma Medical Research Foundation, which is one of our organizations here on the campus of the OU Medical Center has recently put on a seminar with a number large investment bankers who came to town for the first time and we have never been able to really get a whole lot of these big investors from other parts of the country to look in Oklahoma City as a possible investment location for bioscience companies. Generally they've come in taken companies away. Well we had this, I say we, Oklahoma Research Foundation with the help of some of the other entities has this seminar here this last couple weeks and it was very well attended by well over 35 or 40 people from around the world, literally -

>> Wow, wow.

>> And we were hopeful that this will become an annual affair and all of these people come in and if they get involved in companies, they start paying a lot more money, then we have a lot more people coming in.

>> Don't you think the positive economic news of Oklahoma and Oklahoma City that the generation of income and growth, economic growth we've had here is, because it's made national news, worldwide news. That's obviously gotten investor intension.

>> Yes it has and frankly it's also gotten a lot of young people's attention who used to not consider to Oklahoma state -

>> Yeah they wouldn't want to go to New York or LA or to the big Chicago, Boston areas and now they're looking at Oklahoma here.

>> We're actually seeing large numbers of -

>> Really.

>> Of young children, young children, you kids that are coming in after getting there, either their MBAs or their advanced degrees and going to work for companies here in the research park and all over the city of Oklahoma City, but they like to see a place where there's action.

>> Well they've got a double edge here. They've got a great lifestyle, they want to get married and start a family, it's, compared to the bigger cities that we compete with, the cost of living here against the salaries they're making. I mean, my gosh. Look at the, there's all kinds of benefits.

>> No question. No question.

>> One of the roles I play here at OCAST includes serving on the greater Oklahoma City chambers internal KC advisory comity. We're in, we try to recruit students who are already here participating in internships to either move to Oklahoma or stay here if they currently live here by sort of selling the city to them. So that's a really cool program to be a part of and I know that you also on the, is it the board of directors for the chamber? Or you have some relationship with the chamber, can you talk a little bit about that and what you do with them?

>> Yes, at this time I am on the executive comity at the chamber represented by the science sector. I've been so impressed with my involvement at the greater Oklahoma City Chamber because they truly are the leader in business development and business recruitment for our metropolitan area. They work very closely with city government, one of the only business communities that really works closely in a friendly manner with their city government and we've been very, very pleased with how government and business have worked together. Chamber is the leadership of that, provides the leadership for that and they did a lot, they do all the convention and business bureau work as well as business economic development, let by Roy Williams who is just in a first class job as chairman, as president -

>> And he's done an awesome job, awesome job as all the past chairs. Roy has been a great asset to the chamber.

>> With that question, great asset to our community and I've learned a lot by being associated with that organization.

>> Absolutely.

>> It's very impressive to see the numbers in, when you talk about tax revenues for Oklahoma City and how much biotechnology has had an impact on our tax revenues. You want to talk a little bit about that because I find that amusing, amazing that one industry like this, it's estimated that 227 million in the state of local Texas has generated just as a result of direct or indirect bioscience related employment. That's big.

>> Well it just shows that we are getting diversified, it shows that there are highly paid jobs, it shows that there's businesses that are generating good revenues, there's educational institutions that are generating significant dollars, paying those to students who then end up spending that money and being the multiplier effect going into effect.

>> Some of these, a lot of these companies here in the PHF, now the OU Research Park are bio, these companies that are like bio, they are biotech companies that we just talked about. And I know we've seen, you mentioned a company earlier, Cytovance, is obviously a great success story from the park. Are there other success stories that you can talk about? Maybe not naming a company, but obviously a lot of really great stuff comes out of here.

>> We have a lot of companies that have grown to a level that they're doing what I'll call final surveys, final efforts at doing testing to see whether their drug or their serum that they've come up with will be a big success. You know Selexys has got a great reputation. They are doing very well and you can go on and on frankly, with a number, a lot of them have come out of OU and a

lot of them have come out of the Oklahoma Research Foundation and we're not seeing companies actually from outside of this medical center being brought in. There's been a couple of them that have come in, set up shop, and they're doing business here as well. So once again, the goal would be that we become a real center for bioscience research, bioscience companies, and bioscience successes and we're moving in that direction.

>> I can definitely tell you the OCAST offices are in the research park and it's really cool to be located right here and be able to see up and close what sort of awesome things are going on here in this park. It's pretty impressive and exciting for the future.

>> Well in OCAST as well as its arm, i2E, have done a great deal towards helping to make these successes to become reality, or these efforts to become reality.

>> I'm not sure that people, when they come to Oklahoma City, we know a lot of people listening to this program may have to come to Oklahoma City, come to the OU Health Sciences campus, whether it's to go to one of the hospitals or one of the other research or medical facilities. When you look at this campus and all the fingers that are attached, this is quite a complex here.

>> No question and it's going to continue to expand. There's an awful lot of discussion going on as part of the innovation district, which will open up areas which could have more housing, more non-research type businesses as well, retail, people can go in and buy school supplies or clothes or have good meals or go out, like in Brick Town and have a few beers and shoot -

>> It'll be a happening place -

A lot of collaboration. Here's something else. The University of Oklahoma Health Sciences Center is comprised of seven medical schools that have benefited from the, your foundation's efforts. Talk about that. I mean you obviously have, with the grant monies that have gone out with medical research. Lot of benefits for students here.

>> We've been very fortunate to be able to help with a number of students by bringing in professors who are world-renowned and we've also given scholarships for MD, PhD candidates. We've done that for years and years. We've been able to provide facilities all throughout the campus with the kind of equipment that's needed to be able to have state of the art research being done.

>> So when you look at all the connections between education, between new company evolution as the sciences that are going on here, it's all in one little sector here. what's cool about a student is that not only are they getting quality education here, a lot of these students are taking on internships and actually getting to work for a lot of these companies, that eventually they may get employment. So I mean, and if they're based here, if they're living here, if they're going to school here and all of a sudden some of these students stay on when they get a job that's right across the street. And when you talk about the vision for the innovation district. Wow, I mean that's just a marvelous opportunity for Oklahoma City.

>> We are extremely excited about it. It's going to take some time, but we think that the, basically the plan and the layout will work.

>> I mean is this something that you see could start really starting up bigger, I guess than the plan. That launching this plan within the next three to five years?

>> Without question, yeah. It'll be launched certainly within, after we get this consulting or we'll start spending time and effort, you know working on how we're going to best implement the plan and we are already seeing some people wanting to buy some of the adjacent land and do something with it and we're hopefully that it'll all be things that benefit the future of innovation district.

>> Carl Edwards, our guest. Chairman of the Presbyterian Health Foundation. More to come on *Oklahoma Innovations*.

[Music]

>> This is one of the longest running, weekend radio talk shows in America. *Oklahoma Innovations*, on the OCAST Radio Network.

>> As a police officer, one of the most dangerous parts of my job is arriving on a scene where an armed suspect has barricaded himself or where we suspect some type of booby-trap. We're most vulnerable when we don't know what kinds of explosives and weapons are on the other side. It can be deadly.

>> Tactical Electronic, an Oklahoma based company; events, manufacturer, and sales tools such as under door cameras and video fiberscopes that are used by law enforcement officers, military, and counter terrorism personnel around the globe. The tools allow areas and packages to be inspected from a safe distance, which reduces the risk of injuries and death. With the support of OCAST, the company is developing image recognition software that scans packages and within milliseconds identifies what's inside. OCAST is advancing science and technology that not only improves, but also saves lives. For more information call OCAST toll free at 866-265-2215 or visit us on Facebook or our website ocast.ok.gov.

[Music]

>> CNN Money recently described Oklahoma City as a haven for entrepreneurial risk takers citing comparably low costs of living and a diverse local economy spread across medical research, energy, education, and government and no one knows that better than Carl Edwards, our guest who is chairman of the Presbyterian Health Foundation and of course being in commercial real estate as a partner with Price Edwards & Company, you certainly would know about that, wouldn't you?

>> There have certainly been a lot of risk taking that has helped build Oklahoma City, no question about that. I'm confident that at the end of the Depression there was probably about \$10 in the entire state of Oklahoma and since then we've been able to build the state to a very, very prosperous state. We've had some great risk takers who have come in the oil and gas industry and they have obviously been, you know well documented through the years. We have, in a way kind of copy that with the bioscience industry as we're seeing people work with startups to try to create a medicine or a serum or an invention of equipment that can save lives and those can generate gigantic amounts of wealth as well. We have some really strong areas on our health center campus. We have a great cancer center, the Stevenson Cancer Center. We have the great, the Harold Hamm Diabetes Center, which is, you know becoming world-renowned. We have the Dean McGee Eye Institute, which is extremely well respected everywhere. We have the Oklahoma Medical Research Foundation, which is considered to be one of the major, best run medical research organizations in the country and other organizations throughout and the OU Health Center is full of these kinds of great successes and we hope that the entrepreneurial spirit

that had created us being a center in the oil and gas industry will continue to grow and to the bioscience industries so that we will be able to have many successes and someday they'll be talking about us like they talk about the Boston area and the Silicone Valley area.

>> You know the newest anchor, the 110 million dollar GE Oil and Gas Technology Center being built at Northeast Tenth and Walnut Avenue going to employ about 130 people. That's an interesting twist to the this area because there's so much medically related facilities here. Now we've got an oil and gas research center going in here. How's that going to fit into the picture here?

>> I think it's going to be fabulous because I think it's going to actually cause a number of engineers to work together. They might end up having coffee over at one of the new restaurants just like we would put in during the innovation district. They may talk about something that they're working on in the oil and gas industry and another wonderful scientist might say hey, that would work with the kind of equipment that I'm trying to generate. So I think there will be some great cross pollination and I frankly think that the GE facility will grow significantly over that

>> So you think they'll outgrow it?

>> I think they will grow significantly over the years. I'm very optimistic that would be the case.

>> And what also will be interesting to see is the spinoff companies that come into the area, which will add to the interest of the innovation district.

>> Without question. In fact I can foresee in the future that somebody comes up with a wonderful new process or procedure to help make research for oil and gas and harvesting the oil and gas more efficient and that becomes a spinoff and GE owns part of it, others own part of it, and it becomes something that people need to use in all their daily oil and gas efforts.

>> Oh absolutely.

>> Now I know that the planning comity is just starting to work on this innovation district and you guys don't necessarily have a really strong idea of what the boundaries might be, but it will, at least, encompass the OU Medical Center, correct? And the GE center and hopefully there's a possibility that it might spill across the highway. So this could be a pretty large area that we're talking about, which I think sounds great because there's a lot of area around this medical park and the capital that could use a little bit of good news perhaps, you know in terms of businesses and restaurants and things like that, amenities that are coming to their town.

>> That is correct. I think the innovation district will start out with the health center as its center and they will have the GE facility, the research park, a number of other developments on some of the vacant land that's around here, some of the reclamation of some land. Who knows where it ends up, but we would be very hopeful to see it go across I235 and become part of the redevelopments in that area as well.

>> You know what I'm hoping will evolve out of this is once this development is in a good, solid completion sector of town, that we have other major cities come to Oklahoma and go why didn't we think of that? Even those that are existing now. Why didn't we think of that before we developed our innovation district. I want to talk about the Oklahoma Business Roundtable. Twenty-third year in existence, once of the states in major economic development supports organizations. Talk about that because I know you're very proud to be a part of that.

>> Yes. The Oklahoma Business Roundtable was setup 23 years ago. Its primary job is to help the various, various arms of the state government with economic development, whether it be the department of commerce, the governor's office, or lieutenant governor's office. What it does is it tracks \$5,000 memberships from businesses and individuals throughout the state, provides them opportunities to be involved in helping build economic development for the state, gives them an opportunity also to meet with and discuss economic development opportunities with the governor and the various cabinet members. It's been around, like you said, for 23 years. We've been able to build it to about 180 members. We hope that we will be able to continue to help make it grow and it really does provide an extra added amount of money that's been needed to help build economic development for our state.

>> An interesting statistic here, created over, help create in their efforts help create over 7,600 new jobs and 1.9 million in investment in fiscal year 2014.

>> That's 1.9 billion.

>> Excuse me, billion.

>> Even more impressive.

>> I should've looked through my bifocal on that. Excuse me, 1.9 billion dollars with a B, okay.

>> And so another entity with which you're involved in is OCAST i2E. You are on the board of directors there, correct?

>> That is correct, yes.

>> Tell our listeners a little bit about i2E, if you will. Many may not be aware.

>> Well i2E wears several different hats.

>> Right.

>> It runs the Bioscience Association, it has some other organizations like that that they serve as kind of the leader of, but more importantly it is beginning, it is helping new companies get across first base, second base, third base, and eventually where they actually have a chance to hit a home run. They provide a lot of expertise, they give new companies and startups the kind of advice they need at a time when they're needing advice and they also help raise money for them with some different seed money partnership groups that are, that evaluate the investment and decide if they want to get into it, but with the benefit of the expertise of i2E and they do a great job of really studying new companies, hopefully putting them in the right direction and then raising capital, helping them raise capital so they can succeed.

>> You know Carl, we've talked a lot about bioscience in Oklahoma City, but bioscience spans the state and when we look at some of the areas around Ardmore, for example, which is halfway between Oklahoma City and Dallas, is home to the Samuel Roberts Nobel Foundation. We look at OSU and Stillwater, this is on veterinary medicine and agricultural research and when we look at, of course, the University of Oklahoma campus, which houses all these advance center for genome technology and bioinformatics core facility. Tulsa, the University of Tulsa's Institute of Bioinformatics, and Compensational Biology, the Warren Foundation's Psychiatric Research Center there, that's just touching the surface. So a lot of bit science, bioscience related science going on in the state of Oklahoma.

>> That is and i2E is involved in an awful lot of that. You, just recently there was, in the announcement that the University of Oklahoma's Norman campus was putting into place a bioengineering major so that people can actually get engineering degrees with bioscience involvement, which would then springboard into a lot of these bioscience opportunities throughout the state. And the different organizations you talk about, the Nobel Foundation has been one of the real leaders in agricultural efforts up at Stillwater at OSU in Tulsa, all have bioscience involvement and I think if we continue to help build it, we can see the state of Oklahoma being looked on as one of the real leaders in bioscience throughout the entire nation.

>> Well I have to tell you I admire you for being so enmeshed in all of this because there's a lot of exciting things going on, not only in Oklahoma City, but state wide and I hope our listeners have gotten a better picture of what bioscience means to the state of Oklahoma, the job creation, the economic development, and look at the vision of the future with a possibility of having a strong innovation district in the center of Oklahoma City. Wow, that's just as we're just continuing to climb the ladder of growth and thanks to guys like Carl Edwards that's going to continue. Tessa, we're out of time. We're going to have to go.

>> It's been really fascinating though finding out about where Oklahoma City is going.

>> It is, it is and again, the spot light shines high on Oklahoma science and technology. Join us next time for another addition of *Oklahoma Innovations*. Have a good week.

[Music]

>> You've been listening to *Oklahoma Innovations*, brought to you by OCAST, the Oklahoma Center for the Advancement of Science and Technology. You can hear repeat broadcasts of other OCAST radio programs on our website at ocast.ok.gov. Just click the News Media link. Join us at the same time next week and discover how Oklahoma's investment in science and technology is building a better economy and a brighter future for all Oklahomans. This program is a production of the OCAST Radio Network.