

Transcript

WUTC-FM 88.1 Around and About broadcast about the National SimCenter announcement.

November 20, 2007

>> The SimCenter at the University of Tennessee at Chattanooga is announcing a major philanthropic award this morning of more than \$17 million. This donation will create a national center for computational engineering and education. This morning, major contributors, the Benwood and Lyndhurst foundations join Chattanooga Mayor, Ron Littlefield, along with other city, state, regional, and national leaders. They're meeting at the SimCenter on Martin Luther King Boulevard to celebrate the formation of the national center. Benwood and Lyndhurst Foundations announced contributions of more than \$5 million apiece. With these donations, SimCenter can attract world class researchers and scientists. They can expand its research in teaching staff from 20 to 100 in five years. That will cause the center to outgrow its current facility. Dr. Henry MacDonald, SimCenter's chair of excellence said, Benwood and Lyndhurst foundation were compelled by the mission of the graduate school during a recent tour. They witnessed the tremendous computing power the center uses in partnership with other companies and research leaders, including Tennessee Valley Authority, Arnold Engineering Development Center, and Oakridge National Laboratory. Dr. MacDonald and Dr. Roger Briley, SimCenter's Research coordinator said, this donation is a gift to the university, the region, and to a nation that still wants to lead the world in producing the greatest scientific minds.

>> One of the questions which arises is why do it here? We already use the SimCenter. And that's because we have a model that works and we have shown that it works and we've got our critical mass here, both of faculty and graduate students.

>> SimCenter staff see in the announcement an acknowledgement of the success of Chattanooga's new educational model. That model features team based learning and mentoring.

>> And this is a non-traditional but innovative model and integrated research in education in the university's setting.

>> University research has typically become, you know, professor and the graduate student. This is different. We've shown that it works in engineering and science of engineering, and if you want to expand it, then you should take an organization like the SimCenter and build on it, rather than start from scratch, because it only took, well what, 10 to 15 years to get to where we are to development to the extent that it is developed now to gain the national reputation that we now have.

>> So it's not easy to do in traditional academic environments.

>> The center is moving fast in the public consciousness. It has been in the current location only five years, but its graduates are much in demand.

>> You have to have enlightened support as we have had from UTC, the university and from Chattanooga and its various leaders. You have to have that kind of support to be given an opportunity to do what we've done and that opportunity is not available in very many places, so it's worked to this point and we'd like to, we hope to leverage that and broaden our areas of impact rather than just the one that when we do go into new areas and contribute that way.

>> Now Benwood and Lyndhurst and the other contributing philanthropists, they've looked at the model, they've seen the caliber of the graduates, there were many things that appealed to them about the program.

>> And I think, by in large, their interest is in taking, preparing Chattanooga for the 21st century and ensuring that the population in the city grows. The old industries are disappearing. And in order to sustain the city, it needs to move into the high technology area, you know, brilliant high companies and an educated workforce, and they see this as the sort of leading edge of that or strategy with a lot of yellow effect. You know? We agree with them. We see it that way too. So I think there's the opportunity to change the face of Chattanooga is what attracts them really.

>> You know, the riverfront development that overall this occurring down there changed Chattanooga from, you know, people saying, you know, you don't want to drive through Chattanooga to saying, what a nice place. Well, this is the second phase of that, you know, a nice place to go work and do high technology. That's what we've been trying to do. I think it'll be successful.

>> World class scientists and engineers have been inquiring about the center for a long time, but until now, the university didn't have the seed money for their initiatives. It didn't have startup money to attract the staffs of leading researchers. Dr. MacDonald knows about hiring top notch scientists and researchers. He is two-time director of NASA's AIMS research center in Silicon Valley. There he directed a staff of about 4,500 scientists and researchers. He is also a member of the National Academy of Engineering and he's an honorary fellow of the American Society of Mechanical engineers.

>> Exciting times for us and for the country as a whole, Roger brought up the point just a second ago about it's nationally important because I think the statistics are out there and have been bandied around a large number of people, congress, the federal government, that, you know, India and China are producing engineers probably ten times what we're doing and those engineers are going to go out and they're making their country a lot more efficient. They're building infrastructure and they're driving those nations into the 21st century, into being major world powers. As part of that there will be economic impact on the United States. So I think we can't match their labor cost, but we can match their brainpower. And that's how we're going to compete in the world as it evolves. We're

going to compete by virtue of our skill that we can do things efficiently and fast and really well.

>> People should not think that because the U.S. was and is the centrally dominant in producing super computers that we're dominant in using super computers to solve real world engineering problems. We're not dominant, we're in that area and that is where that data is the future of engineering and we've got to do something to help the nation do that and where better than to do it here, because we already have the right model that works and we know how to expand it and so, it's a great opportunity and the people that are supporting this recognize what a good opportunity to leverage what's done here, so we have, we really have an opportunity to contribute nationally, not to under employ the impact that it can have on Chattanooga and Tennessee. What we need in... Tennessee has a low percentage of people who complete college, or college degrees, let alone who can complete graduate education in critical and national technology areas, so our best and brightest young people need to have an opportunity in Tennessee to become educated in a way that will attract companies to come in and hire them, and we really are excited about being able to contribute to a national critical technology in a way that augments and serves Chattanooga and Tennessee. That is a big motivation for what we want, and that gives us enthusiasm for doing this.

>> Yeah. This investment is one way to keep America a super power.

>> Yeah, and there's a critical need there as Roger pointed out, and we're going to be turning our engineers with skill sets that are going to be really in great demand and will be helpful hopefully statewide and nationally. And indeed as Roger was saying, critically in short supply. So our graduates are going to be in demand and that in turn will create other growth here, success breeds success in this business. Virtue of building the SimCenter.

>> Drs. MacDonald and Briley said the philanthropic award to form the national center builds on the strengths of the university, expanding its ability to solve national and global problems. Challenges for the latest generation of engineers include everything from re-thinking New Orleans levees, building a more efficient aircraft, and anticipating how wind and water currents could spread toxic chemicals throughout a city.

>> So we see it as a very big opportunity to provide both the city and state, the nation, with these people skilled and the tools of the 21st century. They will make the companies they go work for much more efficient and in doing so will create economic development.

>> They said that through having the largest graduate school of computational engineering of its kind already, this award makes it clear that Chattanooga's mission is for UTC to help build the Silicon Valley of the south.

>> There's also the halo effect on hence the nature of Chattanooga and the university, also I'm sure other companies will seek to come here in order to access both the center and the graduates that we produce.

>> Drs. MacDonald and Briley described what could be the first epic flap of the butterfly wing. Chattanooga could transform the south into the epicenter of top tier technology's training. To learn more about the national center, go to SimCenter's website, www.utc.edu/simcenter. That's s-i-m-c-e-n-t-e-r. This is Lana Sutton for Around and About.