

Randy Ray: Welcome to the fifth episode of Reflections From WT, the heart and soul of the Texas panhandle. My name is Randy Ray and for the next 10 minutes, I'm going to be talking to the 11th president of West Texas A&M, Dr. Walter Wendler. We're going to take a break and then I'm going to come back and we're going to talk to a special guest that we have today.

Randy Ray: Dr. Wendler, welcome back and we're off to another, another start.

Dr. Wendler: Yes we are. It's great to have the holiday behind us. I enjoyed it but I'm ready to get back to work and WT is ready to get back to work. It's we're looking forward to the spring semester.

Randy Ray: It doesn't feel like spring right now.

Dr. Wendler: It's cold out there.

Randy Ray: I just always feel the energy on campus when they come back and I love it. And I love this time of year.

Dr. Wendler: I do too. I do too. One time told people it's like being a farmer. You plant crops in the beginning of the semester and then you harvest them at the end of the semester and you go through that cycle and it's kind of a nice cycle to be in because you can see the fruit of your labor. It's there. It's right in front of you. It's students that are changing their lives because of the interaction they have with our faculty and this great campus.

Randy Ray: I call it rebooting. It's time for us to reboot and start again. I like that too. We have a lot of things to talk about today. Lot of exciting things happening on campus. Let's talk about Jon Mark Beilue. Where did you come up with that idea and how did you get connected with him?

Dr. Wendler: Well the idea came up when I heard that he was retiring from the paper and he came with me on one of my high school visits. I spent a day with him going out to the high schools and I think in some ways he saw my heart and I got to know his a little bit that day. We enjoyed that very much and it was very positive. And when I found out that he was getting ready to retire from the Globe News, I thought, I'm going to call him up and see if he might be interested in working for us a little bit.

Dr. Wendler: Sure enough, he said, "No, not right now," but after a period of time he might be interested. He called me about I think about three or four months later, he said, "I'm in." He said, "I'd like to write stories. I would like to share with a wider audience what the people of West Texas A&M University are like." Half of our people come from the Texas panhandle so when he shares the people of West Texas A&M University, he's sharing the people of the Texas panhandle.

Randy Ray: Absolutely. I love the human element that he brings.

Dr. Wendler: I do too.

Randy Ray: Into his stories.

Dr. Wendler: I do too.

Randy Ray: He's a fantastic writer. He really is.

Dr. Wendler: He is. I think he captures the essence of what motivates people and so on and he does it in such a nice way. I think it's very positive for us. In many ways these articles are going to pop up on places that we can't imagine where they'll pop up. People around here really enjoy reading them. The Amarillo Globe News actually picks some of them up from time to time and so do many of the smaller weekly papers in the top 26 counties. I send out my blog to all of those papers weekly and I told Jon Mark that we would do the same thing with his posts and they're picking them up. They're picking them up. I'll bet, I saw one recently that featured you and I will guarantee you the Pampa Paper's going to pick that thing up and you're smiling about it. You like it.

Randy Ray: I don't know if they'll pick it up or not. I think when I got out of there.

Dr. Wendler: Maybe they were but I'll tell you something Randy, they're going to pick it up 'cause if I don't see it soon, they pick up mine quite frequently and if they don't pick up yours I'm going to call them up, say, "I'm not sending you mine anymore if you don't pick up Randy's."

Randy Ray: I appreciated him doing that story on my extended studies class and he also did one on the recent study abroad class that I did to Israel. He's really a great writer and he's doing a lot of good for WT I believe.

Dr. Wendler: There's so much juice in these communities. We're going to talk with Dr. Hunt here in a minute. Our dean of the college of engineering and computer science and mathematics and there was a story on, I'll call her the cafeteria worker at Pantex that came back and got a degree in our excellent engineering program and then went back to Pantex not as a cafeteria worker but as an engineer and I thought to myself, good. It takes my breath away actually thinking about that.

Randy Ray: Fantastic story.

Dr. Wendler: It's a great story. At Pantex, WT is singularly has more graduates from WT at Pantex and they're largely from engineering and also from business that work at Pantex than any other university. More than Texas A&M, more than Texas Tech. Our panhandle people know how to put their head down and go to work and they Pantex, likes that. And I'm glad they like it because Pantex is the very center of our nuclear arms program that helps provides safety and security to the whole nation. Everybody.

Randy Ray: You talked about the hard working Texas panhandle people. Let's talk about people that want to transfer. The hard working people that went to a junior college and want to transfer to WT. Now we make that a little easier for them.

Dr. Wendler: We do. I'm very appreciative of that. I'm a community college graduate myself. Started in New York and then transferred sight unseen to Texas A&M which was probably a good thing 'cause I had gone there first I might have said, "You know? I think I'm going to go to New Jersey. That's far enough away west for me." That's a long way from home. But it turned out to be one of the best things that ever happened to me and I'm thankful for it.

Dr. Wendler: But transfer students are very important to us and transfer students in many ways represent one aspect of the pragmatism of people in west Texas that makes this university so great and that is, they look at cost. They look at a value. They study things and they want to be efficient in how they get things done and for a lot of people, if not for the ability to start at a community college and gain the first couple of years at a very low cost, they could never continue onto a bachelor's degree. That's just the way it is.

Dr. Wendler: I'm very thankful for that and it's one of the things that makes me so fond of being in west Texas. People are thoughtful and careful and they make plans and I like it a lot.

Randy Ray: Yeah, I do too. February 2nd is going to be a big day for you and for WT. Tell us a little bit about that.

Dr. Wendler: Well many of our listeners would know that we have been working on WT125 since the day I got here quite frankly. I remember an event at our house when we broke ground for the Ag building and I told the people that were gathered there for a lunch that it would be very soon that I would be in touch with some of them to help us create a long range plan, what I call a generational plan for West Texas A&M University. Try to plot out to some point in the future we call it WT125 because it will, it is defining what we would like to be in some ways when we reach our 125th birthday which is 2035.

Dr. Wendler: It's taken us over two years to do this plan. We had over 300 people involved. Many local leaders, local officials, elected officials, bankers, lawyers, just all kinds of people. Teachers, we had staff from the campus involved. As a matter of fact, about half of the 300 people were from on campus. The other half were from off campus so it wasn't just a view, kind of an internal view of what we want but it's how we can serve the community better which I think is critically important for a regional university.

Dr. Wendler: We staked out some ground in there. On February 2nd at the Embassy Suites in Amarillo Texas, we're going to have a dinner and basically a celebration of the completion of that plan. We'll unveil the plan and give copies to the people that are there and so on. I think when people look at it, they're going to appreciate

it. And what I like about it is, it's not my plan. It's got plenty of me in it but it really is a plan by these hundreds of people that are fond of West Texas A&M University and want to see it prosper into the future. By golly that is important. That is important because if those people, internal people and external people, don't want to see West Texas A&M University prosper in the future, it's not going to prosper in the future.

Randy Ray: Yeah, I agree with you. I bet you could take anyone, talk to anyone in the Texas panhandle and ask about it, regardless if they went here or not to school here, what do you think about WT? Do you think WT's an important part of the Texas panhandle? I think everyone would say yes.

Dr. Wendler: I agree with you. Randy you're absolutely right. Here's what happens for example in education. 71% of the school teachers in the top 26 counties of Texas and I've had the opportunity to meet many of them as I've visited these 66 high schools out there, 71% have at least one degree from WT. We educate the panhandle and if that doesn't make your knees knock, you're not paying attention. It makes mine knock. This is a huge responsibility that we have to do a good job in our public schools. It is the avenue to a future livelihood for many people that otherwise they wouldn't have access and they're being educated by WT graduates. I just think that is beyond comparison in importance.

Randy Ray: I agree with you. One of the ways that WT is able to do that is its fantastic, award winning faculty and after the break we're going to come back and we're going to talk to one of those interesting faculty members on campus, Dr. Emily Hunt. We'll be back right after this.

Randy Ray: West Texas A&M University is a student body that learns by doing and is always seeking opportunity. Talented and accomplished faculty that teach both in and out of the classroom. Programs that provide timeless information and meet the challenges of today's world. Facilities rich in technology as well as WT history. It's our alumni and donors that make the big difference and set us apart from other universities. With your support, WT will continue to award scholarships to deserving students and strengthen our programs which means a better campus, more in depth education and a lasting cultural and economic impact on our region. Now is the time to strengthen connections, support students and open doors for tomorrow's leaders. Share your experience. Share your heritage. Share your pride.

Randy Ray: Well welcome back to episode five of Reflections from WT, the heart and soul of the Texas panhandle. We've been talking to Dr. Walter Wendler, the 11th president of West Texas A&M. I want to shift gears a little bit and talk to Dr. Emily Hunt who is the dean of the engineering, computer science and mathematic program. Not program but school here on campus at WT. Emily welcome.

Dr. Emily Hunt: Thank you.

Randy Ray: Yeah. I want to ask you about three areas of expertise and if you could, just tell me a little bit about each one of them. First, tell me a little bit thermal fluid. What is that?

Dr. Emily Hunt: Oh, that's one of my favorite things to talk about. You'll have to give me a signal when I've gone too far. Thermal fluids is the study of air or liquid. We look at how do we move heat or energy using air or liquid. When you look at mechanical engineering you can typically break it into three different parts. You can look at your what we call solid mechanics, structures. We look at material science, how do current materials perform? What materials should we choose for this project? Or how do we create a brand new material that maybe has never been before? And then the last part of mechanical engineering which is my area is thermal fluids. Thank you for asking me that and getting me started off in such a comfortable way.

Randy Ray: I also discovered that you have two patents on nanostructured metallic alloys. Sounds like something from Star Trek to me.

Dr. Emily Hunt: Yes. We have developed two different materials. One of them is we call nanochargers but we're looking at, we use nanomaterials, we create new materials using fire actually. Instead of typically when you think about combustion you think about using up a fuel and an oxidizer. In our case we're actually using fire to create something that has never been before. These materials function at very high temperatures, extreme environments and then what we've also realized is that they store energy longer. With all of the development that we have with wind energy in this region, that energy storage is a very big deal and something that as engineers, we're always working on. Yes, I've had the opportunity to get to work on that.

Randy Ray: You talked a little bit about engineering thermal fluid and engineering nanostructured metallic alloys. Talk a little bit about engineering elephants.

Dr. Emily Hunt: Another passion is children's books. We have written, I work with my advisor actually from the old days. She's also a mechanical engineer and we've written several books together where we try to introduce the idea of engineering to elementary school kids. We feel like it's important because a lot of times when you talk to an elementary school child, they don't know what engineering is. Their first response is someone who drive trains or they think of someone that they've seen as an engineer before which is someone's dad or uncle or their granddad. Very rarely are young women introduced to the idea of engineering in elementary school or even have someone to look at and see that looks like them that's an engineer. We've worked really hard to help young students develop what we call an engineering identity as early as kindergarten.

Randy Ray: You touched a little bit on girls in engineering. Talk a little bit about that. I'm assuming that engineering is a male dominated industry and you're trying to change that.

Dr. Emily Hunt: We are. We're trying to change that because we think that we know, research has shown us that the more diversity you have on a team, a design team specifically is what we're talking about, the better results that you're going to get. The more innovative the solution. The more creative. We are trying to create diversity in engineering. Right now, in our engineering school, we're about 90% male but those 10% females that we do have are strong and they're doing incredible things. But yes, working to recruit underrepresented groups is definitely something that is important to us in engineering.

Randy Ray: What else is important to the school of engineering here? Tell me a little bit just about the school and what you think the future is going to be like over there.

Dr. Emily Hunt: Okay. We have a wide range of undergraduate engineering programs now so we offer degrees in electrical, mechanical, civil, environmental, engineering technology. We have degrees in computer science and degrees in mathematics and mathematics education. We are educating the future of technology in this region is really what we believe and what we've seen to be true. We, I would say the two main topics that students are focusing on right now are water and energy. It's hard to be an engineer in the Texas panhandle and not know that those two areas are where our future is.

Randy Ray: Very important. Very important. Tell me a success story. Tell me story of one of your student that have graduated from WT and gone onto be successful.

Dr. Emily Hunt: Okay. There's so many.

Randy Ray: There's a lot of them, I know.

Dr. Emily Hunt: Yes. I would definitely say too, the unique, the common thread among our students is their willingness to work hard. When I think about working hard, I think about a student that I had several years ago, her name was Jenna. Jenna came and she was in my 8:00 o'clock class when I was teaching fluid mechanics and I noticed that in this 8:00 o'clock class she was so tired. You could just tell. She looked like she hadn't slept at all. I got to know her a little bit and found out that it was because she was a working mom and the shift that she worked was until 4:00 in the morning and then she would go home and sleep for a couple hours and then be at my class at 8:00 AM.

Dr. Emily Hunt: I got to work with her more over the next couple of years and when I had her in senior design, it was interesting timing, she was expecting her second baby by the end of the semester. She's going through this course which we consider to be the most rigorous of engineering courses. It's our capstone course and she was designing a system that would alert parents when their car seat was in the back of the car and they exited the car but the car seat could still detect that there was a weight. At that time, there was some stories on the news where parents would actually, and I'm parent I know. Sometimes you just drive to work. She had designed this system. It was incredible but the whole time she

was in school, she was working a full-time job and raising two children and she was pursuing a mechanical engineering degree which a lot of times as a female has challenges of its own.

Dr. Emily Hunt: She came to me in senior design and said, "I want to go to graduate school." I told her, "If anyone can work through graduate school, you can." Graduate school is about doing the work. Being there every day. At that time we didn't have our Masters program and I was able to connect her with a program at Texas Tech. Her family is from the panhandle and so she wanted to stay pretty close. She move her family to Lubbock and gets her Masters degree, finishes her PhD and she's now an assistant professor at the University of Colorado in Colorado Springs doing some really transformational work in additive manufacturing. 3D printing, energetic materials. Her work is fascinating and she, that's what it was. She wanted to work hard from the very beginning. And the first time I met her I thought, she's going to do something great and she is. She's doing something great right now.

Randy Ray: I went to, I got my undergraduate degree at WT and I had been all over this campus but I had never been in your building until gosh, probably six months ago. It's a beautiful building. It feels brand new even though it's an older building. Tell us a little bit about your facility.

Dr. Emily Hunt: Okay. We just moved in. We've only been in the second floor for the last year. We had the opportunity when this building was, it has been on campus for years and they it was mothballed for awhile and then we had the opportunity to work on the spaces. When we were redoing it for engineering remodeling the second floor, the first floor too. What we did is we remodeled it to have spaces that were intentionally for student design and creativity. All the time we're enforcing this in class, we're saying, "You have to be creative and you've got to take this time and you've got to brainstorm." But then we looked around and they didn't have anywhere. We were filling up the library with engineering students and while we're glad for them to go to the library, we wanted to also be able to provide that space for them. When we redid the building we were very intentional with our design. We have several engineering design spaces and they're open all the time. We don't book classrooms or anything like that or classes in them because we want the students to know they always have place to go.

Dr. Emily Hunt: We also designed them to foster group work. You've seen them. To foster some creativity. And then we did things that we thought the students would identify with are, you can see all of our HVAC, speaking of thermal fluids. When you think of your air conditioning system, that's what it is. We designed it so that that's all open. Students can see how that's working. Our elevator is also the same way. All of the mechanical, electrical components are visible and so we're at home there because it's all of the things that we like. We've had a great response from students.

Randy Ray: It is a beautiful building and so glad that we remodeled that one and brought it back to life. All right I'm going to ask Dr. Wendler and Dr. Hunt, I want to ask you both, here's our curve ball that I traditionally throw at everyone on every one of our episodes. If either one of you were to talk to 18 year old Emily Hunt, 18 year old Walter Wendler, what advice would you give them? Dr. Wendler, why don't you go first?

Dr. Wendler: Oh mercy. I think I'd tell him to keep your head down and just keep working. Keep moving forward and working and not faint. Don't be weak kneed about what it is that you're doing. Have some confidence in it and keep plugging.

Randy Ray: Dr. Hunt, what would you tell your 18 year old self?

Dr. Emily Hunt: I would definitely tell myself to stick with engineering. I didn't know then the doors that would be opened as far as research and design work and just the absolute fulfillment that this path, career path would bring in my life. I remember being 18 and thinking, I'm the only girl in this room. What am I doing? I think I would just encourage myself, stick with it. This is what you're supposed to be doing and it does turn out well in the end.

Randy Ray: I think if I were to talk to my 18 year old self the advice I would give me is, get a haircut.

Dr. Wendler: Hey, that still works.

Randy Ray: Well thank you for joining us for episode five of Reflections From WT, the heart and soul of the Texas panhandle. Join us again next time. We'll be looking for you then.