

## **EPISODE LINK**

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## **SHOW DESCRIPTION**

Lauren Parker, senior project designer at [Stantec Consulting](#) joins Denise McIntosh to discuss her love of engineering, how she found her way to her position, how being the only woman in some of her classes informed her professional life, and how she keeps it all balanced.

## **QUOTES**

We had a woman come to speak in high school, and that's what changed my trajectory. She introduced herself as an electrical engineer. I was thinking to myself, maybe that's more something that I want to do. Hearing her talk about what she does in her everyday life. And I stuck with that ever since.

I think education's the best investment you can do. It's something that can't be taken away from you. Something that you can always gain from. Learning and having that capability and willingness to learn and try new things and be able to self-reflect or change your point of view.

When I went to UIC, that was the first time that I really met people from around the world. And that was so interesting, learning about different cultures and sharing their food. And that was a real eyeopener for me. I felt like that was a defining moment for me when I really felt like I was moving into adulthood and being part of something bigger than myself.

Even when I was in school I would be the only woman, so I was acclimated to that early. But I will say, and I give credit to all the individuals I work with, when I came on site everyone was welcoming or respectful. And I felt like they understood what I was there to do.

The guy looked me up and down and then rolled his eyes like, are you serious? So, I thought to myself, "oh, okay, I'm gonna show you." So the way that I approach situations like that, I just let my work speak for itself.

So I was thinking to myself, wow, this would be great for a mechanical fix. That way you can avoid movement injuries, and you have people using the knife and they're slicing. I mean,

they're good at it. That was very impressive. But I was thinking to myself, yeah, we definitely could do something to fix that for sure.

Just letting young women know that you can do this. It doesn't matter your background. You have the capability to be an engineer.

Being part of something bigger than myself. I get a lot of joy in that. And I don't just mean professionally. With my friends, my family, you know, going through life together. 'Cause we're all in this together, right? We are able to work together, live together, play together. That's what brings me joy.

## **SHOW TRANSCRIPT**

### **Denise:**

Welcome to the Art of Engineering podcast, and today I have the honor of having Ms. Lauren Parker, who is a senior project designer at [Stantec Consulting](#). But we, and we have not met in person, but we got connected because at the Powder book show in Chicago, when she was in a former job at Gland Nutritional, there was a connection made between [Glanbia](#) and us at the, at the Powder book show. So, and there is a Springfield Missouri plant for Glanbia. So my first question, Lauren, have you been to Springfield, Missouri?

### **Lauren:**

I have not been to Springfield, Missouri, but I have been to our two facilities at that time when I was working for them in Aurora and in Illinois and Sunrise, Florida.

### **Denise:**

Well, welcome. And, and I love seeing all of the titles behind your name, Lauren, because you are a project management professional, an MBA candidate at the University of Illinois. You have Lean Six Sigma, Green Belt and White Belt, and I just saw that you have a new one, which may be part of the MBA, is the Strategic Leadership and Management specialization certification, tell me about that.

### **Lauren:**

Sure. So as part of the MBA program, depending on if you take certain courses, they contribute to different certifications. So I just completed the strategic leadership certification, which means that I've taken classes both in leading a team, learning about psychological, creating psychological safe environments, how to actually, you know, manage, like, how to manage a company from a high level, from, you know, operational management standpoint. So since I've completed that curriculum, I now have that certificate. And my ultimate specialization that I'm really interested in is mergers and acquisitions. So when I complete my studies, I, I'll have that one as well.

**Denise:**

So tell me, you've recently made a change from being an electrical, well, you have those degrees in electrical engineering. And worked at Glambia for some time. What was your impetus to change and go to Stantec?

**Lauren:**

When I first started in the field I did consulting for a, a different company, which was Ian Engineering, which is now Ian Trust. They recently did a name change. I traveled through Oklahoma and Texas, mostly doing oil and gas projects. So I had that consulting background before I then moved to Glambia in late 2019, right before COVID. And then with Gia I mostly did that move because I, I wanted to do something different from the, the consulting. So I tried my hand at manufacturing and I really enjoyed it, you know, being at the plant and working and, and learning a new industry was really exciting. And it, it was nice. I didn't have to travel as much, so I was really able to build relationships with the people I worked with in the plant. You know, I kind of became their, their subject matter expert for their systems, my boss and I.

So ultimately after about six years there, I thought, well, I, I was happy there and, and, and everything but one of my friends contacted me, actually from Ian, and he had mentioned the growth that was happening at Stantec, but he said, oh, no, it's, you know, building automation and, and you, you won't be traveling per se. You, you'll be more so designing, not really doing the, the commissioning installation type work. And I thought, oh, that's interesting. And, and there would be a path possibly to leadership in the position there. So I, you know, I inquired about it and you know, had interviews with the team there, fantastic people at Stantec. Everyone was so welcoming. The culture there is very, very I'd say it was I was very comfortable talking to them, and I felt like it was a place where I could feel a sense of belonging. So that kind of drove me to say, okay, maybe I will give this company a chance. So ultimately, that's how I ended up with Stantec.

**Denise:**

So you are relatively new to Stantec, but Stantec is a name that we've known at custom powder systems for, well, our, our 20 years. And I think probably it was back when our group, we started the Integrated Containment Systems group, and it seems like it had something to do with Department of Energy work and maybe glove boxes. So tell me a little bit about Stantec, because they are a large and long time, and I are, how would you describe Stantec as a company Lauren?

**Lauren:**

I, I will say I, I feel the same as, as you, I was quite impressed with their portfolio of, you know, what all that they have done and they're looking to do. I'm, I'm still meeting people in roles I didn't know exists. Like so I'm part of our buildings group. Okay. So we have specialty services within buildings, like audio services. So like if making sure that equipment isn't too loud for people I, I didn't know that was a specialty, but it's,

**Denise:**

Yes.

**Lauren:**

And then on the other side, like you had mentioned environmental, we have a water team of like 2,500 people. And I'm thinking to myself, just people were experts on water. I didn't know that, you know, existed, you know? So I, I have to say I was quite surprised at that. I will say admittedly, I did not know about the company before. I, I started with them. But I will say that thus far, having, you know, been there and been introduced to just these wonderfully technically sound people, I mean, they, they have a wonderful group of people. We recently had a meeting with where our business center leaders all came to the, the office in downtown on Orleans Street. And they were just talking about the growth that they have you know and how excited they were for the future. And I definitely could see that even with the, you know, people I talk to, I, I haven't heard anyone yet who hasn't had great things to say about being there.

**Denise:**

So I am curious, because I don't think there are a whole bunch of women electrical engineers. So go back to Lauren's childhood, or how did you get an interest in electrical engineering?

**Lauren:**

So, funny story, I, so when I was in high school, originally, I wanted to go into medicine. We actually had a woman come to speak at the high school. This was so long ago. I was probably about 16. So unfortunately I don't remember her name, but I do remember what she said. And, and that's what changed my trajectory. She introduced herself as an electrical engineer. And at that time, I didn't really know much about the engineering discipline, like how it's structured, that there's different facets to it, chemical, mechanical, electrical. I did not know that at the time. And I had always had interest in computers and electronics and building things, you know when I was a little kid, my dad got a camcorder, you know, and I, I took that thing and I learned how to use it. You know, I was in grade school, but at that was like, learning how things work was something that was of interest to me.

So when I found out I could do that as a, when I found out I could do that as a job, I was thinking to myself, maybe that's more something that I want to do. You know, hearing her talk about what she does in her everyday life. And you know, from there when it was time to, to choose a college I would say I wanna do engineering, so, you know, and be an electrical engineer. And I, I stuck with that ever since.

**Denise:**

So, did you grow up in the Chicago area?

**Lauren:**

Yes, ma'am. I grew up on the south side of Chicago right next to the Nabisco factory on the 77th and Kedzie. So I lived there most of my life. Yep. Up until I graduated from college in 2012. So

**Denise:**

At the University of Illinois. And that's where you're getting your MBA?

**Lauren:**

Yes, ma'am. So my bachelor's was done at the sister school to Urbana, which was university of Illinois, Chicago. So I was actually downtown some people might know Circle Campus from back in the day. But yes. So I was at UIC for my electrical engineering degree. And now I'm doing my MBA online with the University of Illinois Champaign Urbana.

**Denise:**

A Lifelong Learner.

**Lauren:**

Yes. <laugh>.

**Denise:**

I think that's what it takes these days.

**Lauren:**

I, I think so too. It, it's, you know, of, of anything in life. You know, when they talk about investments, you hear now about, you know, making money, fast money, all these things. I think education's the best investment you can do. You know, it's something that can't be taken away from you. You know, it's something that you can always gain from, you know, even if it's not monetary, you know the experience that you have. Learning and having that capability and willingness to learn and, and try new things and, and even like, be able to self-reflect, you know, learn from your experiences or, or even being able to change your point of view when given new information. I think that really helps to create, you know, an, a emotionally mature, you know, individual, someone who can, you know, be, you know, that, that professional person. And, and that's something that I admire when I meet someone who, who has that drive to learn as well. You know, I, I always find that to be a charming aspect to someone.

**Denise:**

Yes. And I got my MBA years ago at the University of Nebraska, Omaha. And I, and I've said for years, I learned as much from my fellow students because we came from all different industries and professions, and it was just, it was just such a great experience.

**Lauren:**

I agree. When I went to UIC, that was the first time that I really met people from around the world. And that was so interesting, learning about different cultures and sharing their food. And that it was a real eyeopener for me, you know, from, you know, because when, when you grow

up more so you may, you remember in the, the box of where, where you live, and then, you know, even a big city like Chicago e even in, you know, you, you kind of, within your neighborhood, you know, depending, you may not get as much exposure to, to different cultures, you know. So being able to, to have that experience in school, that I felt like that was a defining moment for me when I really felt like I was moving into adulthood and being part of something bigger than myself was learning about the world that's out there, you know, besides what I had already knew.

**Denise:**

You've been with Stantec, you said, a little over a month. Yes. What is it a day in the life of Lauren look like?

**Lauren:**

Sure. So I take the train the BNSF from Naperville down to Chicago. And I take that time to work on schoolwork and, you know, basically have time to myself before I you know, get off the train. And I, I make a, a mile walk up to my office, and that's my excuse to get my exercise, because I am not an athletic person at all. So I, I took that opportunity to, to try to be better about that. So and then on site you know, we, we go through our, our day-to-day activities, meetings, et cetera. Right now, I'm still learning the processes at Stantec, you know, kind of getting my niche, so to speak. But every, every day it's, I'm learning something different. You know, I got to go on a, a site visit recently. I can't say who our customers are, but being able to kind of see the behind the scenes of some of these places, you know, that I haven't been to, and kinda see, you know, how buildings work. 'cause, You know, this is a, a new field for me. It's really fascinating, you know, and, and everyone I've met has been wonderful. The building engineers and, and the people involved, our customers, everyone has, has have been, you know really welcoming and and it's been a great experience thus far.

**Denise:**

Describe one of the most challenging automation projects you've worked on.

**Lauren:**

Oh, yes. So back when I was with Glambia Performance Nutrition we had a project that involved the consolidation of our two largest plants. We, we had one, we actually had two plants in Aurora. One was the older original Optum Nutrition plant because Glambia purchased Optum Nutrition which is now their large glam performance nutrition's largest brand. So the move was to take the, any machinery that we wanted to keep and move into our larger 600,000 square foot facility. So that involved you know, once the machinery came over, you know, getting everything reinstalled, making sure it's in working order. 'cause some of the machinery was old even purchasing new machinery. So all that had to be done while keeping operations flowing. So if we shut down one line in the old plant, we were starting it up in the new one.

So the, the, the time and the effort, and this was all during COVID as well. So dealing with, yes. Dealing with, you know, having to deal with social distancing and all these other aspects when you're trying to, to do an installation, you have trades everywhere. Like, you know, it was, it was really it was a tense time, you know, getting all that working and supply issues. You know, we had wait times for things. So having it all come together. 'cause I think overall, we brought over it, was it three blenders, kinda saw 300 cubic foot lenders got installed, including all of the automation and involved with installing with getting that running. I believe we added, was it? Yeah, I think it was, I'm counting off the top of my head. I believe it was seven packaging lines that got moved over.

Yes. It was a lot. So fillers, rotary capping machines, packing Mach case Packers, palletizers. And just over the time expanding upon that, 'cause even though we installed that new we installed all those lines, we ended up modernizing even more over the time that I was there, because that, that, that was within the first year I, I worked there. So, wow. From that point on, we were constantly modernizing, constantly, you know, trying to automate the process more. Because one thing I forgot to mention was the older plant was more manual. So not only were we, you know, bringing the machinery over, we're also automating it to the point that even the personnel that we, 'cause we did end up moving the personnel over as well. So getting them acclimated to automation as well. So there was also that challenge. Of having to retrain. Yes, yes.

**Denise:**

As a woman engineer . In manufacturing, you and I still are not, there are not many of us, although, although our numbers are growing.

**Lauren:**

Yes.

**Denise:**

Any challenges that you've seen or had to overcome? And how did you do that?

**Lauren:**

The main one as you said is there's not many of us. So even when I was in school, you know, I would be the only woman in, you know, especially when you got to the higher level courses in junior and senior year I was the only woman, so I was acclimated to that early. So thankfully it wasn't a hard transition. Once I started my professional career, I kind of, you know, it was just more or less how it, how it was. But I will say, and I give credit to all the individuals I work with. When I came on site, for the most part, everyone was welcoming or respectful. And I felt like, you know, they, they understood, you know, what I was there to do, that I, you know, and they looked to me to be able to be that, you know, that subject matter expert for them.

I believe there was maybe one time I could think of where I walked into a site and the, one of the the technicians on site 'cause my I should preface this by saying my boss had worked there before, and then I was coming to relieve him. And when I walked in and said, you know, I'm the, you know, I'm replacing my boss and I'll be doing the work. And instead, and the guy looked at me and said, you, you know, like, kind of looked me up and down and said, and then rolled his eyes like, are you serious? You know? So I thought to myself, I was like, oh, okay, I'm gonna show you. So the way that I approach situations like that, I just let my work speak for itself. I came in with professionalism, got it working.

And you know what, at the end of that whole project, we were friends, you know? Yes. He, he, he, he saw what I could do. And then he thought, you know, and he even said, he said, you know, you did a, a bang up job. You know, so at the end of the day, you know, it, we all have our, our biases or maybe preconceived notions even when you, when you see someone. 'cause Because I'm a small lady, I'm only five foot two, so, you know, here I am walking in, he's thinking, oh, you know, she's not gonna be able to do this. You know? I've had people ask me, he's like, well, you know, 'cause when I told him what I, I've done, they're like, well, how old are you? Like, couldn't have done all of these things. You know, it's <laugh>, it's, I kind of, I, I kind of find it, you know, it's like, oh, okay. It's like a little challenge in a way. It's like, alright, well I'll show you. You know, you know, that's the best way I find the kinda I guess push that

**Denise:**

You're so right. It's what we bring to the table. Yes. And it's what we bring to the table every day that Yes, yes.

**Lauren:**

Yeah. I, I found that's the best way. I know. I don't argue, I don't, that's, I just keep it professional, you know? Obviously if it was a case where it was a situation, if I was uncomfortable, I could do stoppage work or, but it, I never had a situation where thankfully I've had to do that. But yeah, no, for the most part, you know, I, I, that machine starts up and everyone's smiling and, you know, and they were just gimme more work. Yeah. Then they started saying, I, I want Lauren to come to my site, you know? And they started asking for me by name. So it's like, all right. At that point, I, it was, it was all good. <Laugh>.

**Denise:**

Yeah. Yeah. So, have you ever walked into a facility mm-hmm <affirmative>. Because I find it fascinating when people walk in here and go, why are you doing that?

'Cause You know, it's, we've been here now 20 years, and it's like we, we sometimes can't see the forest for the trees. So have you ever walked into a facility and thought, why are they doing that? And, and boy, I could fix that.

**Lauren:**

Oh, for sure. My, and my last facility, like I, I mentioned to you a lot of the process, they did processes that they we're doing were manual. And one of them was so you would have



materials come in, craft bags, and they would have to manually slice them open and oh my goodness, with the arduous tasks that is for the people, they have, they're 50 pound bags, and so they have ergo slides and everything, ergonomic slides to be able to, you know, move them off of a pallet. But still all of that sideways movement and, and the, you know, using a, a knife sharp knife to open Oh, yeah. And things like that. So I was thinking to myself, wow, you know, this would be great for, you know, a mechanical fix, you know, 'cause, so that way you can avoid, you know, movement injuries, you know, like people have protective gloves and everything, but you still have that, you know, you have people using the knife, you know, and they're slicing, they have to move fast, you know, so they're slicing those bags. I mean, they're good at it. That was very impressive. But I was thinking to myself, yeah, we definitely could do something to fix that for sure. <Laugh>, you know, especially that, that sideways movement of those heavy bags, you know, that's, yes. I was just

**Denise:**

It's just asking for workers' comp claims.

**Lauren:**

Sure. Absolutely. So that's, you know, and, and then there's a large amount of labor to do that task as well. So it, you know, it's like, it's like 10 people in a room just, just slicing these bags, you know, get, or doing the motion of getting the bags, you know, to the machine off the pallet and slicing, and it's like, yeah. Just from an efficiency standpoint, you know, and, and like you said, the safety standpoint, it's like a, a nightmare. So I'm thinking to myself, yeah, definitely. It'd be, you know, if you did like an automatic slitting or something and, you know, taking sanitary, you know, conditions into account as well. Yes. So that's something I definitely thought stood out to me as that could be a automated task for sure. And they definitely would get benefit from it.

**Denise:**

So as you look into the future, yes. What what might be a favorite tool or piece of technology right now that you're using? Or is AI something that can be used in your profession?

**Lauren:**

You know, it's interesting you mention that. 'cause I, I have been watching very closely, you know, the development of ai, I believe, what was it? Chat GPT wasn't that 2019 when that came to the forefront, so to speak?

**Denise:**

I think so,

**Lauren:**

Yeah. It's, it's, it's moved so quickly in these past six years now. It just amazes me what people are able to do with it now. So I often think to myself, you know, is it going to be a point where you have the computers programming themselves, which could be a conflict of interest, I would think. But <laugh>, you know, we, we've, we, I've checked myself and I see nothing wrong, you

know, I don't know the ability to self-regulate but as a tool to help my everyday workflow as far as like proposal writing or, you know, things of that nature. I do see a benefit in it when it comes to more, you know, monotonous tasks and or, and there are tasks that are very frequent simple. I could see it being a benefit from an efficiency standpoint. I'm not too comfortable with the idea of the, of the computer's programming themselves, because I still feel like you need that human touch to be able to understand, you know, if something truly is, you know, doing what you need it to do.

'Cause a computer doesn't understand the world outside of a computer, so, right. I, I would think that we would still need a person that would have to be that stop gap, you know? Not saying that we would go full terminator, but, you know, because that, that's the sensationalism, right? Oh, no, we're gonna, the machines are gonna take over. But I mean, we do see, you know, people losing their positions because of, of ai. So, you know, maybe not in in Arnold Schwarzenegger-esque style, you know, the takeover is more so in people's everyday lives. So, you know, as, as a programmer, it is something that I think about, you know yeah. Moving to the future. So, but I hope that it's more so, as I said before, as a, as a tool. Yes. A tool that I can add to my toolbox to help me and not so much see it as a threat, you know, kind of like the, the ice man in the refrigerator. Right. You know? Yes. <laugh> <laugh>, you know, I hope to see it more like a screwdriver or a wrench, you know? Yeah.

**Denise:**

So yeah, A tool.

**Lauren:**

Yes. A tool. Something that can enhance or help but not hinder.

**Denise:**

Yes.

**Lauren:**

Yes.

**Denise:**

So what, you know, we need, we need more people like us, Lauren. In engineering and manufacturing and, and how can we, how can we help promote that to share with, to share with young people the opportunities in engineering and manufacturing.

**Lauren:**

What I find is, when I think back to young Lauren in high school, being present doing things like we're doing here, this podcast, just letting you know, young women know that you can do this. You know it doesn't matter your background, you know, you have the capability, you know, to be an engineer because you can hear people say, oh, the math. And while I will say it, it's not easy,

but I feel that there could be things done to help ease into that. Either if it be certain curriculum in schools or maybe supplemental that we could do to help not make math so scary.

**Denise:**

Well, thank you Lauren. And yes, I think the more we can encourage young people and particularly women since we are yes women to just share opportunities about what, what all is available in, in all of these fields.

**Lauren:**

Yes.

**Denise:**

And then central to that, because we need to find joy in our lives. What brings you joy?

**Lauren:**

Being part of something bigger than myself. I get a lot of joy in that. And I don't just mean professionally with my friends, my family, just, you know, going through life together. 'cause We're all in this together, right? That's, we are being able to work together, live together work, play together. That's what brings me joy. Just, you know, being able to go through life surrounded by the, the people I care about and, and then the, the people I get a chance to meet and work with. I, you know, that's really what gives me a sense of purpose and gives me a sense of satisfaction in what I do. Being is being a part of that, being present in that. And, you know, whether I have an impact on someone or if they have an impact on me, you know, I, I feel that's the beautiful part of life, right? It's always that new experience. So that, that's what I always have found joy in learning something new and getting those new experiences

**Denise:**

Back to that lifelong learner, <laugh> and <inaudible> says, we're just all walking each other home. Yeah. Well, Lauren, thank you so much for joining us today and I do hope we get to meet in person one of these days. 'cause I lived in Chicago for a time and I lo I love to come back and visit.

**Lauren:**

Sure. I would love that. Actually. You just let me know. I'll be there. <Laugh>.

**Denise:**

Well hope our paths cross in person one of these days. But thank you so much for joining me today on the Art of Engineering.

**Lauren:**

Thank you so much. I really appreciate this opportunity, Denise.

