Sami Al-AbdRabbuh Oral History Interview, September 13, 2016

Title
“Engineering a Better World”

Date
September 13, 2016

Location
Valley Library, Oregon State University.

Summary
In the interview, Al-AbdRabbuh discusses his family background and early years in Arizona, his family's relocation to Saudi Arabia, and the roles that both religion and science played during his youth. From there, he reflects on his undergraduate studies at King Fahd University of Petroleum and Minerals, noting the differences in the Saudi educational system as compared to the United States, and also speaking of his academic progression and social life while an undergraduate. Al-AbdRabbuh then recalls his early working career and shares his memories of the terrorist attacks of September 11, 2001.

The session then turns its attentions to Al-AbdRabbuh's move to Oregon and his adjustment to the Pacific Northwest. In recounting the specifics of his time at OSU, Al-AbdRabbuh emphasizes his master's studies in Industrial Engineering, details his involvement with OSU's solar car team, and describes the process by which he decided to pursue a doctorate at Oregon State. Next, he responds to a series of questions about culture, sharing his thoughts on the environment faced by the Muslim and Arabic-speaking communities in Corvallis, and commenting on the roles played on campus and within the community by the Salman Alfarisi Islamic Center, the Etihad Cultural Center, and the INTO program.

The final major subject of the interview is Al-AbdRabbuh's involvement in public service and political affairs. In tracing this component of his life, Al-AbdRabbuh discusses his activities as a member of ASOSU's legislative branch, and also details his "Humans of Corvallis" project, which ultimately expanded into a cross-country train trip during which he interviewed random acquaintances about their world views. The session concludes with background on Al-AbdRabbuh's decision to run for state representative; his thoughts on future ambitions; and his sense of OSU as it looks toward its sesquicentennial.

Interviewee
Sami Al-AbdRabbuh

Interviewer
Chris Petersen

Website
http://scarc.library.oregonstate.edu/oh150/alabdrabbuh/

Transcript

Chris Petersen: OK, today is September 13th, 2016 and we are in the Valley Library with Sami Al-AbdRabbuh. [mispronounced; laughs]

Sami Al-AbdRabbuh: That's right, Sami Al-AbdRabbuh. [properly pronounced]

CP: OK. I've been practicing that and still managed to more or less butcher it, but I appreciate your patience.

SA: Fine.

CP: So Sami is a Ph.D. candidate here at OSU right now and has been a master's degree recipient as well, and has been very involved in lots of different things. And we're going to talk about plenty of that but I would like to begin by learning more about your upbringing. Could you perhaps tell us first about your family – your parents and their story?

SA: Absolutely. Fast forwarding, my grandfather was a carpenter in Saudi Arabia. He divorced his Saudi wife, which was close to the family, and decided to marry a woman from Syria, which is my grandmother. My father was one of their six children and my grandfather had three extra, and my father, when he grew up, he was curious, passionate about building devices. He went to U of A in Tucson, got his computer engineering degree, and he eventually decided to go on the same steps and path of his father. So he decided to marry a Syrian woman as well. So he got married with my mother, she's Syrian, her mother was raised in Lebanon. So when people tell me, "where are you from?" in American standards, I would say I was born in the United States where my father was still doing his degree and I was born in Tucson. That's the American standard. But in the Arabic standard, you are where your heritage is from, so not even where I was raised but where my grandfather or maybe grand-grandfather originally settled at some point in time. So in that standard, I would be half Syrian, half Saudi. Or maybe a quarter Lebanese, half Syrian, a quarter Saudi.

And that's how I was brought to life in Tucson. I lived there for a couple of years. All that I remember – I remember something very vividly, actually, the fireworks on the 4th of July. I saw them and I remember the letter A, the very big letter A, and that's one of my earliest childhood memories. I called my dad two years ago when we were passing Tucson driving, I was like, "I see this letter A, this might not be real, but I remember it with lights and I remember fireworks. Was that real?" And he was like, "yeah, you were months old. We were there in the parking lot watching the fireworks. And I tell your grandmother that I have memories from two or three years old and she does believe me, and now I believe myself." So apparently I have very early childhood memories; that's one of the earliest ones.

We moved to Phoenix, I went to kindergarten there for one year, and then we moved to Saudi Arabia. And when I moved to Saudi Arabia, my grandmother tried to teach me Arabic and she did a really good job. My English was very proficient, I had a very good accent – even better than mine right now – I would correct my parents, but they did not really give me lots of Arabic other than the very standard basic Arabic that you would communicate and maybe hide by and other stuff. So my grandmother took two months to teach me how to read, write, speak, and recite the Koran in Arabic. And it took her like two or three months maximum, and I was very proficient in it. I went to first grade with other Arabic students, and it was a really tough time. I'm not that smart but she was very persistent to really get me to learn the language. And I had the social barrier where I cannot connect with everyone except those who speak English. So that was good motivation for me to be immersed and to learn the language as if it would be my first language.

So that's where it started. When I lived in Saudi Arabia I studied in public schools all the way to fifth grade. My father decided to get me into a private school because of better standards, better atmosphere. In fourth or third grade, I got bullied. There are many opportunities for people to really fight with each other; it's not really the best atmosphere, or it wasn't at the time. So I was in private school. We had probably fifteen, sixteen classmates – probably maximum thirty – and my grade was one class only. So very, very limited options to connect with people.

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After that, for fifth, sixth, seventh, eighth and eventually for ninth grade, I told my father, "I want to move out to a public school." He goes, "are you nuts? It's better standards." I was like, "yeah, I understand that, but I want to understand the community, I want to interact with people. There are many science club competitions that I can't access because I'm not in

the public system. I want to do that." So he was like, "fine, but at any point in time you have a back-up plan, you can go back." I said, "I am definitely not going back."

So ninth grade all the way until I graduated high school, I was in a public school in Saudi Arabia, within a small city called Jubail. It's the city where the biggest petrochemical complex in the world is stationed. That's where my father worked in a couple of places, one of them was a refinery. And that was basically my childhood in a nutshell. I grew up briefly in the United States and mainly in Saudi Arabia, in public schools and private schools.

CP: Did religion play much of a role in your upbringing?

SA: Absolutely, absolutely. I started learning religion when I was seven, eight years old. My grandmother, she started teaching me how to pray. You know the social pressure about fasting, "everyone in fasting, I want to do it even though I'm a kid." You're only allowed to fast half a day and then, "no, I want to do the whole thing." So that was the beginning, it was basically these practices. We had some tough times during my childhood, so my grandmother would get me to pray to understand prayers, to understand saying prayers to connect with God and to try to find something that will make you feel better and make you have some hope.

So that was the initial seed of it but it grew up with me with my grandmother and then, eventually, my father. He had a different approach about religion, more individualistic, so you do not have to conform with other institutions or other groups as long as you understand the religion by yourself. So many of the social aspects of religion were there and I saw them, I was exposed to them, but I was very privileged and lucky to have my father have this kind of mentoring to me. It was, "you don't need to conform, you need to make up your own mind about it." I used to be the curious kid who asks questions all the time, so I think he used that for the best advantage with that aspect, where he made me really think about the "why, why, why?"

That was very important aspect to it until, I would say, I was somewhere between twelve and fourteen. We got introduced to family friends, they are Syrian, the husband is an engineer and the wife is a doctor, and they're both very religious from the orthodox Christianity. So I was trying to learn about Christianity, what is Christianity? What I learned in school about Christianity and what Christianity is from people who practice it. And the husband, Nicola, he introduced me to the idea of debating. Sometimes he would put the devil's advocate hat and sometimes he would debate about issues where I would bring him what I knew about anything, like from the Koran. He would say, "wait a minute, I don't believe in the Koran, I believe in the Bible. So how about I bring you something from the Bible." So then I understood that sometimes you need to really understand that religion really has its own place, and logic or having a common ground with someone else can't go into an authority that you only believe in. That was a very, very profound aspect into my life; understanding where religion plays and where religion should be put to not influence your way of thinking, not to influence the way that you connect with others.

So eventually we would talk about even the existence of God, even though he believes in it. But he wanted to really challenge me. And we would go into discussions, sometimes my stomach would even hurt because it's more of a debate and an intensive talk back and forth, and I was very young. And I told my dad about it, "I get a stomach ache out of these discussions," he was like, "OK, so do you think you have to?" I was like, "I don't know, yes, because they are very intense discussions." And he was like, "no, you don't have to. Either stop doing these discussions or you discuss without getting emotionally involved." And that was just a groundbreaking finding for me, that I can discuss without feeling offended or feeling like I should prove myself right or wrong.

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And that's what religion turned out to be for me. It's an aspect where I appreciate my heritage, I appreciate the values that I have, the virtues that I have. I'm trying to explore it somewhere else. It could be with someone who sees their values and they are grounded by the values that they find from nature or from a scholar who is not a religious figure. Whatever it is, I will find a place to connect with others. And I owe it a lot to both my father and our family friend who really challenged me early in my time.

CP: I gather that science was something that appealed to you from an early age as well.

SA: Oh yeah. I think I was curious and the curiosity – my father is an engineer; we are all curious. You would see all kids asking questions; the way that he does with it was really good. I ask him question, back in the days we had a dictionary, we had the encyclopedia, "have you looked into the encyclopedia? Have you looked into the dictionary?" He does not answer right away. I would be like, "the dictionary is really hard to figure the letters." He was like, "OK, but now you will remember it because you are working your way through it." And that's really helped me a lot.

I have a really nice story about that. So in fifth grade, my grandfather passed away and we were in Jubail, an hour away from my grandfather's hometown. So he told me, "your grandfather passed away, let's go back home for the funeral." And I was just shocked for a few minutes. But while we were driving in the car, I saw that the huge tall water desalination towers, and we see them every single time we go there – we used to go weekly, biweekly, monthly – but I see them every single time. So I started asking him questions like, "so, could we have water desalination without these tall towers? How water desalination works? What's the difference between osmosic and the other technologies?" And I kept asking him questions and questions and questions, and he would entertain them with answering them; sometimes admit his limited knowledge about my questions or sometimes he would give me extensive knowledge about it. And actually, he had better knowledge than any average engineer about water desalination.

But halfway through the questions – or toward the end of my questions, but I had more to ask – he was like, "Sami, my father just passed away. If you can hold your questions to another time." And that hit me. I had a little bit of silence where I had to think about two things. The first thing, I was thinking about how cool water desalination technology is. But the second thing, I realized how foolish I was, not appreciating the moment, and how honorable it was that despite the most hardest moments in his life, he just lost his dad, but his kid's curiosity had a priority. He did not say, "shut up" immediately, he started to entertain questions. And I still remember it. I don't know how to pay it back, because it reflects the values that he embraced in me is to stay curious, to ask questions, to start learning.

CP: That is a great story. Was college something that you always had in your sights?

SA: I don't know, maybe. Maybe it was a standard. Unfortunately, that's a privilege I took for granted. My father was the second one to go to college in the family, after his older brother. My grandfather was a carpenter and, back in the time, college was not the standard for everyone. So maybe he was a pioneer into being the first generation. For me, I took it as a standard, "yeah, he got a degree, now he's an engineer, we have a life standard because of his job." So probably it was there on the back of my mind, but I would say it evolved also through my curiosity journey. Toward the end of my ninth grade or tenth grade, we bought a circuit kit. So you would have 500 circuits that you could assemble and I started doing some circuits. I assembled two circuits together, one of them was an amplifier that amplifies the sound and the other one sends Morse code to the AM wave radio. So I combined them together so now you can speak to the speaker and you can listen my voice over the radio. It was simple, this connection of the two circuits and connecting them together at one point, but it was a great accomplishment at my age.

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And that's where I proceeded to go to a gifted program in eleventh grade, it was a summer program, one month, and it was at the university where I got my undergrad. After I finished that program, I was solid sold on, "I want to continue, one month is not enough. I want to go to this specific school because of what I've been exposed to." So maybe that was the deal-breaker for me, after going through the summer experience.

CP: And that school was the King Fahd University of Petroleum and Minerals, is that correct?

SA: That is correct. It is abbreviated to KFUPM. We brag about it in Saudi as the MIT of the Middle East. It's not MIT, but it's one of the very prestigious technical universities. It was founded on the same grounds, or nearby, of the first productive oil well in Saudi Arabia. So it was oriented toward serving the oil and energy industry. They had engineering and business administration majors, and now they have more majors. So that's where I got my degree. It's where my older uncle got his degree. It's a good university and a different system than here.

CP: Can you talk about that, the differences?

SA: Absolutely. So I would talk about it from the perspective of how I saw it. They claim that they have an American system of education and I would say that's pretty much accurate, when I saw it. They teach the same textbooks, the grading system is very similar, there is many similarities. Its faculty come from everywhere in the world – you have American, Pakistani, Indian, New Zealand professors who teach. The differences that you would see is the culture; there is huge differences in the culture. You have to be attending classes. If you don't attend classes for any reason, you might be subject to dismissal and denial from getting a grade, which is worse than an F because an F is that you worked and you got an F. But a DN, it's the worst because it reflects that you not only failed but you failed because you did not attend. But many people have their excuses. So that's one element that I saw as very intriguing, that you have to have this discipline of showing up, being there, following the system. It builds discipline and you need that. Especially for young people in Saudi, I think learning discipline and following specific rules are important.

But the way that I see it's different from Oregon State or the other university that I've been to – UTSA, University of Texas, San Antonio, where I did my internship – that here it's more open, there is more trust. There, you really need to earn the trust and most of the time the system will not give you that trust as much as we give it here. There is many resources that you will find in Saudi. I was able to purchase the same textbooks that we would study here, if I would study the same subject. Professors did mainly their degrees in Europe and the United States.

But I was a graduate of the university and I decided to go to Saudi even though I had a couple of opportunities to have a scholarship in the States, out of this understanding that "I am eighteen, I need to understand the Saudi culture. If I go to America, I am not going to understand the Saudi culture." I had this intention. KFUPM served that partially, but it does not give it to everyone by standard, you have to work for it. Oregon State works more about the cultural inclusivity, being connected with the community. That's something that actually I have witnessed evolving while I was at the university in KFUPM, where they're trying to really establish connections with partners in the community and introduce volunteering and community service into programs. So I would say there is many similarities and many differences as well.

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CP: Your degree was in Control and Instrumentation Systems Engineering. Is that equivalent to Industrial Engineering in the U.S.?

SA: It's not, it's not. So under a Systems Engineering department – and traditionally, or historically, that was part of the Computer Engineering department – we have two majors, they are very distinct, Industrial Systems Engineering and Control and Instrumentation Systems Engineering. They both have a commonality in terms of understanding the system and going from there. Industrial Systems, which is Industrial Engineering here in the United States, look into a system in terms of productivity, increasing efficiency, reducing errors, reducing costs and so on. For Control and Instrumentation, it's more about understanding the circuits, the theory of how you can control the process, understanding the process as an overall, the environment and how you can control it. What kind of sensors, what kind of actuators that needs to be in the system to maintain the product?

I was confused whether to go for this major or that major actually, I was passionate about both. And I went to my to-be advisor and chairman of the program, Dr. Fouad Al-Sunni, who is one of the very few wise men who influenced my life, I went to him in my orientation year, which is the pre-freshman year when you have to eventually decide your major. And I told him, "I still don't know what to do, where to go." He was knowledgeable about both majors, but he was Control and Instrumentation. He was not really influencing me to go anywhere, he's telling me, "look, this is this, this is that." The way he described it, an industrial engineer, if they were working in a restaurant they would say, "when should we order the Pepsi or the Coke inventory to be refilled? How much money are we making off that? How could we do the layout?" But a control and instrumentation engineer will design the instrument that will pump the Pepsi and make sure that it will go to the edge of the lid, depending on the size, how the sensors will work, how the flow of the pumps will work. So that's the distinction between them.

There are very few majors in the United States. Back in 1998, when he did the review – I read a couple of the reviews that he did – back in 1998, there was two majors only that have Control and Instrumentation in their program in the United States. It was specifically oriented to serve a niche in industry where you need somebody who is knowledgeable about electrical engineering, briefly mechanical engineering, and a good understanding about processes, which is a little bit about process control or chemical engineering. So it's a hybrid major.

CP: Oriented towards the petroleum industry?

SA: I would say toward any process control industry. That could be petroleum, petrochemical, you could be in water and waste treatment. You can be, I would say, any chemical pharmaceutical. So any production line probably, but mainly if you have a production line that is one bottle at a time, it's easier and it's not that complex, so you need to have control and instrumentation systems engineers. More about fluid control, like refineries and pharmaceuticals, these places you need a process control person.

CP: We've alluded to this a little bit, but I'm wondering if you could speak a little more about your social experience during your time as an undergraduate.

SA: Oh, wow. It's five years, I would say there's plenty. So I was there, I was perceived as a Saudi by nationality, so it was really great for me to be within the majority. In high school I was bullied many times because I was in the minority of the Shiites, from my religious affiliation. Even if I don't speak about my religion, my identity will be shown or will be perceived immediately, or almost immediately – it's really hard to hide it. At KFUPM, it was more professional where you don't have that bias. I'm aware of some students or some colleagues who had that bias.

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But more importantly, my program was one of the few exceptions, back at the time, where a non-Saudi student could have access to an engineering degree. So all others except for the Industrial and Control and Instrumentation programs were banned from non-Saudi students. And at the time, that was a privilege for me, because my colleagues were Kenyan, Egyptian, Jordanian, Palestinian; people from all around. We had, actually, a few Saudis in my own major; within the department we had plenty of other Saudis. So that expanded my horizon. I enjoyed it because mainly, and this might be a generalization, mainly my colleagues were hard workers, they wanted to get an engineering degree. They were not going to the easiest engineering degree by the perception of undergraduates. So that was a great experience.

I was very passionate about projects and I told my advisor after the interview, "you know, I think I like industrial engineering." But I told him, "if I get an industrial engineering for my undergraduate, can I go back into control instrumentation?" He said, "well, it's very hard. The other way around, possibly." And that's where I decided "I want to have my masters or my career in industrial engineering," it serves, in my perspective, a broader vision. However, control instrumentation is really great because it's hands-on. I love circuits and I wanted to learn about robotics, that was my passion at the time.

So we had lots of hands-on projects. We did some seismic measurements and displays. One of the projects we had was – let me go to this, actually, this is one of my highlights of my experiences. So we had a digital logic design, which is basically understanding mathematical logic and applying it to circuits. So that was the class and we were required to produce a project, an idea. The same semester, I happened to be playing ping pong, or table tennis, for my PAC class. And I hated counting; I hate counting what's the score when I'm playing. I want to play, I want to know who's going to serve right now, that's it. I don't want to follow the score; I don't want to follow who's serve it is. And it's complex to compute it. So while we were playing and I'm hearing the "beak, beak, beak, beak," I was like, I know this, I should do this. And the idea was to create a circuit that will decide who is winning the game and to decide what's the score and who should serve next. So that was my digital logic design project. I did this with a couple of colleagues. We had like, probably, one, two, three, four parts of the circuit connected together and we had to have suppliers all over, it was just crazy. And that the end, the product that you will see is two displays with numbers and you have two buttons to simulate the ping pong balls hits.

So we started there and my advisor, who was a Canadian, was impressed by the work. He lobbied to get me whatever support I need afterwards; we got an A, needless to say. But after that, he was like, "you need to continue on with this. Actually, you need to apply for a patent." And they just happened to have this program where you can apply for a patent and if you just apply and it gets filed, they'll give you 3,000 riyals, somewhere around $900. If it gets granted, you'll get 7,000 riyals and more down the line if you market it.

So I went through the process. We applied for a patent, myself and one of my colleagues, and through the process they had an attorney who will give us feedback, "this is not really the perfect idea, here are some other ideas that are similar to it, how do you separate yourself from them." So we started evolving our idea down the road, understanding what's

out there in terms of originality and what could we produce as a specific original thing. That was the most important experience I had, I would say, or one of the most important ones in my undergrad.

We initiated a couple of clubs. I was the president of an International Society of Automation student branch in KFUPM, and we had the Systems Engineering Club. And at the time, we had some money to do projects, so I was like, "great idea to buy table tennis and put it in the lab and play it there." So we did that. We had a purchase order, we had to really explain it a little bit why we need to buy a table tennis, and we got a support, we had a dedicated lab where you would have a table tennis. My colleagues will have fun playing and we put some sensors on the table that will hear the bounces. We had a computer attached to it that will analyze the signature of the ball bounce, and eventually it will give you the score.

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And through that prototype – I worked through a couple of classes to do it – and one of the funny things, we had this professor for signals and systems who wanted to see if it was working. So the idea of it is that if you do this [raps knuckles on table] the sensors will not capture it. If you drop the ball, it will capture it. If you put the racket, it will not capture it; just the ball signature. So we had this kind of not perfect signature detection, so he would knock with his finger, with his ring, it would not go. And then he would drop his pen and my colleagues look at him and they're like, "who on Earth will be playing and drop their pen on the table." And that hit me, like sometimes your idea, you really want to create the perfect solution but sometimes it's not the practical solution.

But just to end that story or that experience, we did not get the patent granted. We dropped it down the road when we discovered that there was some prior literature that was almost similar to what we were doing; it's really hard to distinguish ourselves from it. And another reason where I was not really encouraged, one of the criteria or the key performance measurements for that administration was how many patents we can file in the United States, the USPTO, the patent office in the United States. And the idea was there were some rankings for universities behind that. So I asked them, "are you going to file it in China, Korea and Japan?" They were like "no, we don't really care about that. The technology is there." It's like, "this is table tennis, we should really care about filing there." And that's where I saw there is no practical benefits in continuing it but the learning process was just amazing. I feel really proud of that experience with my colleague who did that.

CP: Well you finished up in 2010 and after you had completed your degree, what did you have in mind next?

SA: Well, almost six months or a year before I finished my degree, I was in a speaking engagement, like public speaking competition, and I was speaking about science experiments and how I was engaged in science experiments and explaining some of them – I used to be volunteering in science exhibits and stuff. So after that, one of the people who were sitting at the back was my future business partner. He looked at me and he said, "Sami, I used to do that same and I was curious if you were interested in doing something like that." And I told him, "actually, I just filed for a business plan to do something similar to this." So I filed the business plan, it won a competition across the Saudi nation for business plans – one of the best fifty in the nation – and out of that they told us, "if you want to do your business, we can incubate you." So there's an incubator, and we were one of the pioneers in the incubator.

So as soon as I graduated, I had that business going. I was still testing the water, understanding the processes, navigating through the rules and how you can really establish your business. But it wasn't enough. I had to really think about a professional career other than a business in science communication and experiments for kids and youth, which is Crispy Science, that's my company that I founded with my partner Ali. So I applied for three companies, one of them was NEPC, which is a contracting company that manages engineering projects; it is a Japanese company. Another one was, I believe, SABIC, which is a Saudi Arabian basic petrochemical industry company, and another one was General Electric. So I applied for the three of them, I got offers from the three of them, I had to consult, I had a couple of my friends come in who I really trust their opinions, and they are entrepreneurs, so at least I saw that maybe they fit the same profile of who I wanted to be. I showed them my Excel sheet with my criteria, the salary, my numbers, and eventually I decided to go and join with General Electric.

They had a headquarters in Bahrain for the Middle East and North Africa, and I joined two businesses – the Bently Nevada business, which is a vibration monitoring systems, where any rotating equipment will vibrate naturally – whether

it's a turbine or a mill, whatever it is that rotates – you need to measure vibration in the rotation. And sometimes you need to send a signal as a warning and sometimes you need to signal to trip and shut down a machine. So I used to work on that with General Electric as a design engineer, and also I helped a little bit with building stations or machines that will monitor the controller. So they are called HMI, which is Human Machine Interface, where operators will see what the controller is doing as a screen. So I would set up the machine and I would help design the screens and making sure that we have a network of machines that's reliable, so that the connections between them, over the Ethernet or whatever it is, is reliable. So I spent fifteen months with that. We worked with multi-million dollar projects with a couple of industries – oil and gas, petrochemical and the electrical company in Saudi.

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CP: You were in Bahrain on September 11th?

SA: September 11th, 2001?

CP: 2001, yeah.

SA: No, I was in Saudi Arabia.

CP: You were? OK. Can you tell me about that experience for you?

SA: Yeah. I was fourteen. In Saudi Arabia, because of the time difference, it was around three or four PM. My father was just getting out of his job and I was watching the t.v. immediately after the first plane hit. So I was watching, I can't remember, Al Jazeera or one of those, and while watching it, the second plane hit, and I saw it in front of me, live. And I was by myself – still I'm remembering where I was, the screen – and my father comes and I was like, "Dad, Dad, look at this! This is in New York, one plane hit, another plane just hit!" He was like, "did you see it?" And I was like, "yeah, the second plane just hit, it was flying right into it." And he looked at it, he asked me more questions to explain who did it, I explained whatever the t.v. anchors were saying.

Then he looked at me and he said, "what do you think about this? Is this OK?" I was like, "I don't know?" He was like, "how many people will die out of this," and I was like, "many; there are still people out there." And he was like, "yes, just remember, whatever people will tell you, there is never going to be a justification that this is OK. This is wrong. Whoever has done it, they are wrong, they are people who are doing bad stuff, whatever reason is that." And he had this vision, he knew it that there were going to be people who would abuse this for whatever reason. And at that time, we did not for certain that Al-Quaeda or some planner would claim responsibility eventually; it was just, no one knows what is it. If you have a context of how the tensions were, the Middle East region had some tensions with the American government and what they were doing in the Middle East; the Israeli-Palestinian conflict. So there was some tensions and he immediately saw that it is the most important thing to tell his kid, at the time, that this is wrong.

And he was right. I have heard people justifying it. I have heard people talking why this is good and why this is bad, and I had my mind set to it. Whenever people will try to abuse the verses of the Koran or abuse any ideology, I would immediately be resilient. I know this is wrong, regardless, whatever you say, whatever religion you are. It was just great that I had him at that moment beside me and just telling me that.

CP: Well let's talk about OSU. How on Earth did this happen? [laughs] You came here in 2012 to a very different place from where you had been.

SA: Yes. So I had people here before who had visited or studied or got their degrees, and everyone will tell me about it as heaven on Earth. It's great, the trees, the colors in the fall. So I already loved the place, so it's something cool to check out. Toward December, there was the seventh or tenth, maybe, stage of scholarships by the late King Abdullah of Saudi Arabia, where they would grant scholarships for almost anyone who applies to them – minimum requirements, absolutely, but certainly easy to get into if you have a good standing. And I was like, "let me apply." I want to have my degree someday, but I knew I had to have some experience at the beginning and many, many advice I received is "get some experience on your hands, don't go on grad right away, to masters, at least if you want to have a good understanding of the industry and real life."

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So when I applied, I was in the midst of – my business was growing and we had a team; we had a functioning team. And at the same time, I had a really good job at General Electric, but I needed to decide. One of the pathways could have been a seven-year obligation and, at the time, when I received the offer of the scholarship, I went to another person whose name is Nabil Shalaby, he's an Egyptian professor who used to live in Saudi Arabia and he teaches about entrepreneurship and how to grow your business. I got some training from him about entrepreneurship and I went to him and told him, "I want to meet with you and ask you for some ideas." And I did not bring up the scholarship, I told him about General Electric versus my company and how to build it, what to do with it. And we kept evaluating and he told me, "pursue your dream," and what to do and how to grow the company and how to do it.

And then I dropped the scholarship, "what do you think about the scholarship? I just got this for my master's." He looked at me, he was like, "your business is your dream, but this is an opportunity that is once in a lifetime, to get your masters paid for in the United States. You might not ever have it again. A dream could wait." And it struck me, he was right. I dropped a scholarship opportunity multiple times, I wanted to go the States, I knew there's a different environment, different culture, and I knew there is many opportunities to grow there. So that's where I made the decision to come.

To decide where to go, Boston was an option and Oregon was another option for the scholarship. I searched for engineering management, that's where I saw I wanted to go next from control and instrumentation; probably engineering management is the middle way between industrial engineering and leadership, where you can grow a business or manage a group of engineers or people who can produce technology. So I found Dr. Toni Doolen, who is the dean of the Honors College right now, she was one of the few experts in engineering management. So I saw her accomplishments, her work, her research; it was fascinating. So I think I called her when I was in Saudi and I just asked her about what she does, the work that she do. I did not go further into the program.

But when I came here, I found two things. First of all, there is no engineering management program per se, it's under the industrial engineering. The second thing is that she's not taking any more teaching assistants or research assistants because she's going to her new job. So that was shocking for me. But that was the first inclination. My advisor in UTSA, when I did my internship in autonomous control lab, Dr. Mo Jamshidi, he got his degree in OSU, one of his degrees in OSU. And one of my professors in Saudi Arabia as well. I had a friend here who had her degree from OSU and I just felt it's a small town where you can really be resourceful but at the same time not break your budget. If I was living in Boston now, I know that I would barely survive in terms of accommodation, transportation. At one time, for five weeks, I used to drive for a total of four hours daily between work and home and another job in Saudi and Bahrain, so that was one of the criteria: I want small place where I can be productive, and that happened to be OSU.

CP: So it sounds like it was a good environment, but I have to believe there was some adjusting that was necessary as well. Can you tell me about the adjustment to living in the Pacific Northwest?

SA: Yes. Don't dress up all the time. You need to be relaxed about not dressing up all the time. Usually people are pretty lax about what they wear; even my advisor, who dresses up most of the time – he takes care of his appearance – some of the times I go to him and I say, "excuse me, I'm just coming to the gym" or going to the gym after that. And he says, "as long as you're presentable and you bring your brain with you, that's all I care about." I love this environment, it's amazing. It's pretty relaxed, people assume the best out of you, they are friendly. It's a different culture. Maybe if you see the differences between the East Coast and the West Coast, it's a little bit of that.

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But also, some other differences. As an example, I need to make sure my accent gets better in terms of the Oregonian accent, which is no accent, I understand. So that's something I'm trying to build, but now I'm embracing my own accent. But adjusting, the rain, loving it. You have to love the rain if you're ever deciding to live in the Pacific Northwest. At one time, you might catch an allergy and that's a compromise; if you want to enjoy nature, probably you have to appreciate that your immune system is not really happy all the time. So that's another thing that I discovered, that I could catch a couple of allergies after a year or two.

But the laid back environment was shocking for me. Then it was surprising, then I used it for my benefit, and then I went back a little bit to be disciplined – still laid back, but disciplined. The Saudi culture, in terms of being late, it's not good to be late anywhere, but maybe it's more relaxed about being late here. No, you should be on time regardless. It's about respecting people's time. It's a different mentality where time is valuable for people and you should always appreciate people's time. Being late is being friendly in other cultures. So that was one of the biggest things that I saw as a very important thing that I should distinguish.

The idea that you can bring your computer and type, you can read, you can do whatever, you can have the calculator in your exams – many of these things are different in the American educational system, compared to KFUPM, which is partially American but more influenced by the British system, which demands more memorization, discipline in terms of you need to remember the material and you need to know your knowledge. Here you need to know how to access the knowledge. Graduate school, it's a different style than undergrad in general.

So that was most of the challenges, but other than that, I really loved it. I felt really at home immediately and one of my acquaintances actually, he feels bored here in Corvallis. And we were talking about Corvallis and I tell people when I went to Corvallis, and after five weeks I got into my new apartment – the Gem, at the time, which is a very tall building on Monroe and Kings – and I saw the view and probably I saw a glimpse of the mountains and the greens and the parking lot, I loved it. I felt like, "this is where I want to die. This is where I want to retire and live my whole life here. Maybe I'll change my mind, but at this time I think this is where I want to be." And that acquaintance looked at me and was like, "you want to die out of boredom, you mean?" [laughs]

So I like the small town and it got me to really understand it's benefits. One decision I took intentionally, not to have a car for two years and rely on the public system, have a bike, and just use that. And I did that for two years – whenever I need to go somewhere, I would go with friends or I would rent a car for an hour or a day.

CP: Well tell me about your master's studies. You majored in Industrial Engineering and you also minored in Business Administration?

SA: That's correct. So, let's go back to Dr. Toni Doolen. After I described to her my passions and what I want to do and how I want to change the world, she listened very patiently to me and then surprising me with the sad news that there's no program in engineering management and she's not taking any TA's or RA's anymore. She told me, "across the aisle, there's a professor that you might like. His name is Ken Funk and you might like him, he might really fit what you want to do." So I was like, "OK," and I immediately went across the hall, his door was open, I knocked the door: "hello Dr. Funk, my name is Sami Al-AbdRabbuh, I was referred to you by Dr. Toni Doolen, this and this and this are what I want to do," and he was like, "yeah, I don't do engineering management, I do human systems engineering," which is human factors. "And actually, I'm going to teach a class in Spring term about human-machine interaction," and he gave me the textbook that he teaches, "so you can borrow it and if you decide to take the class, feel free to register."

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So I felt a little bit sad, I went to read the book, and back in the time, I did not have an acceptance for a master's degree. The scholarship sent me with the expectation to earn admission while I'm here, while I study English, even though I did not need to study English. So I was in the INTO program taking general English, learning some Korean and Japanese from friends and acquaintances. And at the same time, because of my status as an American citizen, I could take English classes and, at the same time, take classes at OSU. So I registered his class as a non-degree seeker, and I fell in love with it. One of the projects was designing an interface for the iPad that you can screen patients as a doctor or nurse, and you can find information about them. It's basically a medical record management system, and we built the interface to be ergonomic. And I like the idea that you can make people safer, more efficient, probably increase their productivity through building technology. I saw that really good link between my expertise as a technical engineer and the idea of industrial engineering, increasing of efficiency. It still a little bit more technical.

So toward the end of the class, we had this project, we presented it, the sponsor of the project was there, and I suited up and we had a really good presentation. So eventually the sponsor exchanged cards with me and he was like, "let's be in touch." And until that time, I did not know if I would be accepted into OSU, I was just taking non-degree seeking classes. I have to admit I also had to increase my GPA to be the bare minimum, take the GRE, really to earn it. So I think I went

Saudi in August after I applied for admission in September. I still don't know if I will continue with English classes and non-degree seeking or if I will get admitted. But eventually my professor said to me that "there is a research assistant opportunity for you, working with this sponsor on another project, it's about Cesarean Section facilitation in emergency situations, and we might use your help. Are you interested?" I was like, "yes, but I'm waiting for my admission." And the next day, I got my admission after saying yes. So I got admission, I got an assistantship offer, and my major was focusing on human systems engineering, but it's an Industrial Engineering degree.

Down the road, I decided to take a Business Administration minor to really give myself a good understanding of how to do business and the business aspect to engineering.

CP: I'm particularly interested to ask you about a couple of extracurricular activities that you were involved with, and the first among them is the solar vehicle team. Can you tell me about that?

SA: Absolutely. I was in the Sustainability Initiative Festival there. There used to be a small house on the south side of the campus where the Student Sustainability Initiative makes different sustainability-related programs and presents themselves. So I was there, there was free food, some free stuff, like gadgets, and there was this solar car sitting over on the grass. And I saw the solar car, it was just fascinating if you see it – The Phoenix. I saw the car and I looked at the students and I was like, "this is a solar car, right?"

"Yep."

"It only runs by solar energy, right?"

"Yep."

I was like, "who built this? You built it?"

"Yep, we built it."

And I opened the hatch and was like, "can I get into it?" I went into it, saw the screen – they had a screen in the panel where it's a steering wheel and a screen at the same time, and it was fascinating. So they told me, "how heavy are you?" And back at the time I was around, less than 110 – I don't want to say how much, but less than 110 pounds. And that was an advantage for a driver of a solar car as less weight as they are, you still have to have a ballast to balance it, but it's an advantage. So I was like, "I'm this weight," and they were like, "are you interested in driving the solar car?" And I was like, "are you kidding me? Sure!"

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So I joined the solar car, mopping the floor, helping them do stuff; electrical work, but very basic, like freshman or sophomore students and me. I was one of their four drivers. Long story short, I joined in there race in 2014, we won the championship in Solar Sun Grand – GTF – so it's not like Formula 1, Formula Sun, for North America. And basically, it was in the Circuit of the Americas. You race laps but rather than finishing a lap in, I don't know, thirty seconds, we finished laps in three or four or five or six minutes. The idea of it is to be consistent, to manage your energy consumption.

The following year, we did the same formula race to qualify for the cross-country race where you would drive on and off the street – I'm sorry, on the street, but on the highways and off to the small, not interstate highways. And you go from Texas all the way to Minnesota over the course of eight days. And the idea was that you manage your energy and you make sure you go as fast as possible, as consistent as possible, without losing energy, going from 100% to 0% on the last day. And we managed to reach the finish line, which I think we did not do before that.

And the last race was in Abu Dhabi, which is in the United Arab Emirates in the Middle East. We got the offer, we did not know if we go initially because of funding, but eventually we got the offer to fly the car and then ship it back, and have all eight members fly there and race it. So we raced it on a Formula 1 track in Abu Dhabi, the Marina, which is on an island. And then after that, we would go across the country through the desert.

So these were the three races that we participated in and I was actually surprised a couple of days after joining and posting about it on Facebook, one of my friends just dropped a link and was like, "look at this." And it was a link from the *Gazette* about a solar car blowing up on its way Da Vinci Days back in 2011, shortly before I came. And it was catching on fire and I was like [makes surprised look] and I went to the founders and was like, "what is this? Did this car blow up?" They're like, "oh yeah, here's a couple of parts that we keep." I was like, "OK, and we're going to drive the car? How safe is this?" They were like, "no, look, the older car was," and I might be wrong in terms of the chemistry, but "it was iron phosphate, now the one that we have is not iron phosphate. The original one, it could overheat and when it overheats it would explode." Now usually you would have some sensors to trip down and you would turn it off, but if it overheats, it explodes. The new technology, it doesn't explode. If it goes way hotter than the allowed temperature, it might even melt but it would not explode or catch on fire. So I was like, "OK," I Googled it, "OK, they seem to me they're knowing what they're doing." And I saw the video of one of the founders, he was brilliant – immediately after the car caught on fire, there was this camera there asking them what happened. And he was like, "I'm pretty sure the battery overheated and this is what happened."

"If you would do it again, what would you do?"

"Immediately, I would take batteries from this company because they have this technology and these batteries don't explode." And surprise surprise, the daughter of one of the leaders in that company contacted him and I think they donated the batteries. So that was very smart, knowing what you do, knowing how you can make it better. The guy who drove the car, I think he got some burns but he went back to school and graduated the same day where Michelle Obama was the speaker. And she saluted his work and mentioned how he preserved to really move forward.

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And I had instances where, actually a student – I think he was sophomore at the time, a year or maybe two after he joined the solar team – we're in the middle of the road and one of the circuits broke, and he was on the phone with the founder and he was trying to fix it. And I was listening what he was trying to do with the circuit. And he did something wrong and immediately it blew one of the capacitors or something; I think one of the circuits, not the capacitors, one the circuits blew, the ICs. It's not a very big deal if you blow an IC, but it's defective. So he's on the phone, he's getting instructions, he did that. And I was on the driving wheel, I looked at him and I knew I could trust him, and I knew that he would fix it. And I was right in my intuition. He immediately got another circuit, he told them, "I blew the circuit, this is what happened." And he was like, "ok, this is what you do, this is where you go," so they changed the circuit, they fixed it, and we were back on the road.

We had lots of emergency situations where you need to have this back-up plan, you need to know what to do and not panic; be really disciplined in how you manage your safety. And I think that was the most impressive experience we had.

If there is time – I think there is time – and people are still listening to this, I think my contribution to the safety was very minimal usually, like they had a really good understanding of what to do. But at one point in time I was very exhausted, we were in Nebraska – Omaha – half of the race, and we had a repetitive problem where the canopy opening the door, which basically opens that way [motions upward] it just slams and doesn't really lock, the locking mechanism was not working and we did not have a replacement for it where you could really secure the canopy whenever there is wind or there were any bumps. So it was challenging, because you have to go to the side, close it, and then drive back. So they have some ideas and at the night, I was very exhausted, I had to really stay away and just sleep. I took my time, I came back in the morning a little bit refreshed and they were getting ready. I was like, "what did you do?" They were like, "yeah, we fixed the canopy."

"What did you do with it?"

"We just put some Velcro around the bars," so you would pull the Velcro around the bars and you would secure it; the driver will do that. And it immediately struck me that we do have some emergency plan mandated by the regulations, which is you have to egress the car, unassisted as a driver, within ten seconds. And we do this testing for all drivers, we have to qualify, there is a competition for the fastest, and usually we have this mental model of what to do: immediately put the steering wheel on the side, unbuckle the five-end belt, with one hand push the door – not very strong, but just

enough to keep it, not to come back on you – and then put your hands, put your legs on the bars, and then jump. So there is this mental model where you do step-by-step.

And as an ergonomics or human factors person, I know simple changes to the system might lead to a disaster, so I was like, "we need to retest the egress; we need to make sure that we know how to do it." They were like, "yeah, she knows how to do it, she Velcros this and then un-Velcros it again." And I was like, "no, she needs to do that whole egress again, because now the egress is a totally different step." They were like, "we will lose our positions. We are starting in ten minutes and if we don't go in line, we will lose our position from second or third to last on line," and that's a full minute between each position and another on the starting line of each day. I was like, "I'm OK with one minute or ten minutes compared to catching on fire and losing one of our drivers." And they were like, "OK, fine." Sometimes I can become really persistent when I want to do it, so I was like, "this is my criteria, why I'm really persistent on it."

So we started doing it, we timed it, and she succeeded in going almost four or five seconds, it wasn't a big deal, by un-Velcroing it. And one of the referees came and he was like, "so what are you doing Sami? Are you certifying a new driver in the middle of the road?" I was like, "oh no, she's a driver, she's certified, but we just added the Velcro and we wanted to make sure that the egress is still within criteria." And he was like, "well, OK." And he noted that down and eventually, toward the end of the race, they mentioned the story and how we did it without it really being required; how we volunteered to do the test. And we got the safety award and the teamwork award at the time. So that's one of the proudest moments in my life. The team did really tremendous amazing things; this is one of the minor ones.

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But I believe there is many opportunities where you can learn in extracurricular activities. As a graduate student, most of them are between freshmen and sophomores or juniors, some seniors. I felt that there's lots of things actually, by interacting with almost half a generation difference. So it was just fascinating.

CP: Well you finished the master's degree in 2015.

SA: That's correct.

CP: Tell me about the decision to stay at OSU and pursue a Ph.D.

SA: [laughs] So, I decided not to pursue my Caesarian Section delivery research work, which was the work that I was doing for my thesis. I saw the value in terms of academic research was not going to be as fulfilling as if I would do something larger, theoretically. So theoretically, I developed a framework for comprehensive emergency management from the functional point of view. So understanding emergency management as a system and analyzing it as a functional system. And because I had done that, I did some basic research on it and published the master's thesis on that, I saw there was more to be done. If I leave this, it's going to be in the ScholarsArchive at the library – great resource – but I need to make it more applicable where I can see how valuable it could be for the industry. So that was one of the major reasons why I was like, "I need to continue this."

Cost and benefit analysis. I have done 2013, 2014, and '15 for a master's; that's longer than the average student for a master's. But I eventually saw that almost all my coursework in my masters could contribute to a Ph.D. I need to do research again; I need to do a little bit of extra classes to have the minimum credits for the Ph.D. I had already overdone my Ph.D. coursework, like I took more classes that could contribute to a minor or even for my major. So it was like, "yeah, why not? Ph.D." It makes sense, I love this community, I believe I can produce more into it. And probably a Ph.D. will empower me if I ever decide to conduct research by my own or have a company that will conduct research, or even teach at a university or do research at a university. All of these venues are limited if you don't have your Ph.D. So that's from one side. It's just humbling to contribute even an amount of hairpin to the knowledge of mankind, and I believe that's something that is possible with a Ph.D.

CP: Well, I want to shift gears a little bit and ask you some questions about culture.

SA: Yeah.

CP: And the first one would be if you could talk a bit about what your sense is of the environment that is experienced by Muslim or Arabic-speaking students or community members here in Corvallis.

SA: I will be very biased because I am myself, and having the American hat that I can put on at any time, I don't know about any struggles about immigration or about visas; I'm trying to learn right now. But I see that this community is really strong in terms of how we understand each other, how we really try to relate to each other. The Muslim community, whether it is Muslim Americans – locals – or Saudi students mainly, but there are some other nationalities who are coming here to get their degrees, some of them begin by having their own community, trying to connect with those who look like them. But eventually, they'll start connecting with the larger community and see a place that they like. Many Saudi students that I know, they just want to stay and they want to not leave, and they feel sorry that they're going back. And many others actually want to go back, they want to bring something to their communities back in their homes, and that's why they are urged to go back home after they saw a great community.

That being said, I would say Oregon is a great place but sometimes, on the surface, it's different than what you see under the surface. I have second-hand or first-hand interactions where people feel that they have been discriminated against or that they have been abused, whether it is physical, verbal or sometimes implicit bias or implicit discrimination. You don't see it when people speak to them in front of everyone, but when they're alone, they would get harassed or abused or get some comments that are not really pleasant. And sometimes a small comment, despite the great privilege that we have, which is freedom of speech and saying what you want, sometimes small words will make people go from feeling at home, feeling belonging, into feeling endangered. It's a responsibility that we should take on ourself. I would say that Muslims in this community, many of which feel at home but some of them, at some instances, they feel that sometimes not everyone is treating them with the responsibility that they are members of this community.

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I would not like to document or mention one instance, people think that's what Muslims or Arabs are going through, but before I came I was really terrified by the idea that there was an attack over the mosque from a, I think, mentally ill person, in retaliation to an individual who lived in this community and who was captured by the FBI and I believe now he is serving his time because of a potential terrorist attack that he was planning. Just knowing that there is this possible retaliation over a community was terrifying for me at the beginning. But looking at the bigger picture, how the community came together, how people from different walks of life – whether it is the faith community or others – really stood by the Muslim community was really reassuring.

I believe Corvallis could be one of the best places for you to build your community, to feel this is yours. But when you get one woman walking on Halloween, getting these comments from a passing-by individual telling her, "are you wearing a terrorist costume?" Or another one driving with her head cover and face cover, and she gets pulled over because someone called on her and said she was threatening, and she would just go through the due process because of that suspicion of what she's wearing, sometimes that terrifies people and makes them really not feeling safe.

I am hopeful though. I feel we are way better than what I thought we would have been, especially after the tragic events of 9/11 and the tragic events after that where many people, whether they are Sikhs or Muslims or Arabs, even Christian Arabs will be targeted or harassed, I feel hopeful that we are now trying to be really a good community. But I feel we can do better. One incident where I called the non-emergency police asking them question, one of my friends captured a phrase on campus with a chalk, says, "Islam kills, kill Islam." He captured it on his camera, shared it with friends, and he really talked about it in a positive way saying how bad it is for someone to write that. And I was curious, I called the non-emergency police number and said, "do you think this is a statement that we should be concerned about?" I think I called, eventually, an officer and he said, "let me look it up," he looked it up and he found it and he read it, and it's like, "well, this is freedom of speech; it's protected by freedom of speech." I was like, "doesn't it target any possible groups?" He was like, "no, it does not target a person or individuals. If you are saying, 'let's kill this individual or let's kill this pot of groups of people,' then we might be concerned. But if you say, 'kill Islam,' its protected by freedom of speech. However, you can report to the campus because that's creating not a good atmosphere and they might treat it differently on campus to make sure we have a good atmosphere."

Personally, I would say I would agree totally with what the officer did and how he treated it. But I believe the context of how we would treat maybe an Arab or Muslim saying immediately counter thing about the United States or whites or

whatever other group, I might feel that they will not be treated the same way, they will not be granted the same rights. Maybe they will be treated as suspected people who might do or act what the words say – "kill Islam" means, ok, you're going to do something about it. Thinking about it now, I think maybe the person was very well-intentioned and he means "kill Islam" is just to make sure that religion don't spread and he wants to practice his own ideology. From the First Amendment point of view, which I respect and honor, it's great. But from the point of view of individuals who are minorities who have been deprived of many of their rights, I believe that they don't feel they are treated equally in terms of feeling safe. So that's where I would put it in a nutshell: it's a great community but there's a lot to be done to really protect our minorities and give them the same treatment we treat everyone.

[1:15:53]

CP: You mentioned that Corvallis has a mosque and I'm interested if you could comment on your sense of the role that the mosque plays in the community as a resource.

SA: Absolutely. I might be not the best person to really talk about the great work they do, but I'm aware of it. I've been serving on many community service programs, especially inter-faith community programs, where we put all different people of faith and organizations of faith together for community service. And they put many programs, whether it is community service, educational. Students will visit the mosque to understand about religions whenever they're taking relevant classes. And I believe they've been very active in really creating a good community and a good sense of Muslims having a place to practice their faith.

Personally, I'm from a denomination where I don't belong for the same specific denomination, which is the Sunni denomination, so that's where I don't really pray there, I pray at my house. But I visited casually to greet them during Ramadan and share meals with them a couple of times. Some of my friends who are very active, they feel that the mosque is really doing great work. The mosque has been engaged with Etihad, which is a local student center for Middle Eastern or – Etihad encompasses Middle East plus, I would say, India and some parts of Africa – and they try to really make sure that they bring the aspect of community and unity, whether with the mosque or with the rabbi from the Jewish community as well.

CP: Can you talk about Etihad a bit? You've had some involvement with them, I gather?

SA: Absolutely. So *etihad* in Arabic, and I believe in several other languages from the Middle East, means "unity." And the idea of it, we have many or several cultural centers that introduce the culture to the general public and that create a place where people who belong to the culture, to embrace it, to celebrate it, and to share it with their friends, beloved ones and colleagues. So we did not have one for the Middle Eastern population, even though it's really big in Oregon State.

I believe that this is really one of the unique ones, maybe in the whole nation, where it encompasses this very big area between India and Morocco, and probably as far as Azerbaijan or Turkey all the way to Sudan and Somalia. So it's lots of ethnicities, religions and languages. They produce programs like celebrations of the Eids, celebrations of Etihad, where they would bring every country, serve food and have dances and music that belongs to the culture; create some programs. And one of them was about the refugee crisis and I was invited to talk at the Etihad about the refugee crisis and what does it mean, what kind of biases that we see in the media or in literature, and what we know compared to what's really there. My mother is a United Nations refugee and I have extended family in Syria, so I might be a little bit knowledgeable about what's going on. And being even introduced to different media outlets other than the American media, I see some differences at least, or discrepancies. I can't say the truth versus the lies, but I would say the discrepancies are there. And it was really great to really get people to know what's going on. And I think during that, they did a drive to get winter clothing, so they do some community service to really help others and bring the culture of generosity and compassion and community to Oregon State, and to embrace the culture with Saudi and Emirati and Moroccish and all other students.

[1:20:16]

CP: And likewise, I'd be interested in your thoughts – the INTO program has been the source of a pretty noticeable surge in the student population of students from the Middle East, especially Saudi Arabia.

SA: Yeah, you're speaking about INTO?

CP: Yeah.

SA: INTO, the English center, is a university partner and I started a job with them eight days ago as a part-time hourly Arabic cultural advisor. And the position was vacant for a year, and the idea of it is we have a surge in Chinese and Arabic population recently. Some of them, they come with almost zero knowledge of anything, like even the word "schedule," they don't know what does it mean when they come here. And they need this help in knowing the resources, knowing how they can get the first step into the university, the first step to find the resources, find friends to talk to and start learning inside and outside the classroom. So they do a really great job and I understand that there is some recreational programs and community-building programs. Part of my job is to connect the university with the INTO program to find out what resources that are under-utilized by Arabic students and they can get to know them and make sure that we accommodate to their needs.

So it's a great program and it's impressive. Sometimes you start with students who can barely speak any languages and they end up getting a degree and are pretty fluent with the language. It's a very crucial and important aspect to make sure that they understand what's going on.

A major part is culture. There is many issues that will be there where you need to make sure that students are coming into a new culture, they need to sustain their own culture, but we need to build this bridge where they can move forward. We celebrate the diversity but, at the same time, they know how to navigate the system. I believe one of the biggest challenges – and I would not say it's my work experience, which is very short right now – but my personal experience with many people, friends or co-workers or others, and Arabic students especially, maybe, from the Gulf region, they would understand processes differently. Processes sometimes are meant to be hard in the Middle East. Sometimes they are really hard to navigate, by design, or they just happen to be. So as an individual you need to work very hard to navigate the system. You need to work very hard to make sure that you find the best path to get into the result, whether it is to get to passing, get your license, or get whatever it is.

The way that we see it here, rules apply for everyone, there's no exceptions. If there's exceptions, they will be stated. Those exceptions need to be done; there should be a review of the policy to establish equity for everyone. We take that for granted here in the United States. In Arabic culture I would say – and this might be a personal opinion only – I might see it that that does not apply all the time. So the tendency is, "how can I navigate the system? How can I make sure that I can be an exception for this policy if the exemption will be faster for me or give me an advantage?" It's the way that they perceive life or they perceive how things work. So to get them to transition from A to B, it's really important to really understand where they are, why they are coming from that aspect, and how they could understand the new culture without really being shocked by absorbing it and knowing how to navigate it in the best way and the way that really conforms with how we do things here.

CP: One thing that we did not talk about when we talked about your adjustment to the Pacific Northwest was food. I'm wondering, are there food resources available for international students that are seeking a little something they're more used to?

SA: Uh, no. [laughs] I would say no. There is resources, there is some food, but it's not how your mother or grandmother would cook it; it's different. Even the restaurants are not how you would know it at home. Like even Chinese food here is not the real Chinese, Arabic food here is not the real Arabic. We have an Americanized version of everything and I think that's a very important thing. We have a bland taste of food. Not to undermine the great resources we have here, we have good businesses, multiple outlets right now. We have several outlets actually for halal food, kosher food, some international restaurants that could do the job. But I believe the best food is what you cook at home.

[1:25:25]

CP: OK. Well, let's transition into our final big subject, and it is a big one for you, it's public service and politics. I think, let's begin with your involvement here on campus. You were involved with the MU Advisory Board, you were in the ASOSU House and Senate, and also the Center for Leadership Development in the Student Experience Center. It's an impressive vita that you've compiled, why don't you tell me a little bit about how this started and how it moved forward.

SA: Thank you. I think that the Memorial Union Advisory Board was one of the first things that got me intrigued a couple years ago. I was intrigued about it because it's an advisory job where you look into budgets, policies, and it's a very big picture thing. And I felt it's really valuable for me. I did that on a very small scale on my start-up, where I would balance a budget of several thousands, but they work they do is several millions. And you have this public budgeting process, or semi-public budgeting process, which was fascinating for me, I wanted to learn about it. So that's where I applied for the Advisory Board, for the MU, and we did the first year. And throughout that, I used to be doing the inter-faith community service as a volunteer, and the ASOSU, the student government here, initiated a new position which facilitates inter-faith community service and inter-faith dialogue and all of these. The position was not originally mandated in the constitution, it was an ad hoc position that the president at the time, Taylor Sarman, initiated, and they wanted to continue.

So I heard about a debate in the Senate that they might discontinue it and actually that they might just stop it immediately, and the lady that was serving that job for the inaugural year, she would be out of a job immediately after that session, if they decided to stop budgeting it right away. And that's where I'd been told about it, and I went there and introduced myself as the Advisory Board member and, after hearing all the dialogue – and let me tell you a little bit of the atmosphere of the dialogue. Some people say, "yeah, I am a person of faith, I feel it's very important to have this connection with other people, and if I was just coming I would like to know people of a similar faith and really get to this sense of belonging, so this might be good." And someone else might say, "I think this is a waste of money, we should not really introduce religion to the public system" or whatever perceptions they had. And there was dialogue about it.

So after all of that, I raised my hand from the gallery and the president of the Senate, the vice-president, Brian, a friend of mine right now, he was like, "please go ahead." I introduced myself, I spelled my name, and then I tell them, "let me tell you a story," and I told them my 9/11 story. And after that, I told them, "you will have people coming from villages from eastern Oregon or from Saudi Arabia, they never seen someone who's different from them, whether they are white or Muslim or Jewish. They need someone like my dad, in college. Maybe they never had this experience that my dad gave me, and we need someone to tell them, 'look, work with this someone who's different from you. Have this dialogue with them about their background. Let's embrace your identity, your spirituality. Let's give you a place where you can practice it. We're not promoting what you should do, but we're telling you if you want to do something, if you want to connect with others, we have a safe place for you to really grow.' And that's why I believe this position should stay. This position is more important than anything else; it could mitigate many misunderstandings, many violent personalities that might grow out of hatred and silos that they will stay in when they are in college, when they see people that are different from them."

[1:29:45]

So after I gave my spiel, at the time they immediately had a motion to table the issue until the end of the year, which means that the position will continue until the end of the year. And the vice-president contacted me after a couple of weeks, he was like, "please call me immediately, I need to talk to you, thank you very much." And he invited me to be on the elections committee of ASOSU. So as an OSU committee, you should not run for office, you should be unbiased, and I was not unbiased but I saw the statistics that the enrollment of international students into the voting was very low, it was like 2% or 1% from INTO and 8% from the graduate students. So there was not much engagement by graduate students or international students. I tried to outreach, especially for graduate students – I'm part of the union – I told them, "look, you are a big constituency. ASOSU is not really serving you as they are serving undergraduates, but you're paying tuition – maybe as union members or paid employees you're not paying directly, you're paying just 10% of it – but you need to really have this influence."

After a week, like toward two days or three days before the end of it, we still did not have any growth in terms of graduate students voting, so I had another email telling them, "just abstain. If you abstain, we will see that you are not satisfied by any of these people. Or actually, you can write-in anyone. Example: Sami Al-AbdRabbuh. So just write any person." So some people took that literally and they wrote my name on every single ticket from president all the way to the graduate House of Representatives, and given that there was no applicant for the graduate House of Representatives, I got qualified for that one by some write-ins. So that made me the House of Representatives member the following year. But toward the end of the year, I was like, "do you have vacancies in the Senate?" And they were like, "yeah, just apply." So I applied, I stayed for a few sessions. The solar car team got defunded by the College of Engineering, so we created a resolution to urge the College of Engineering to really refund them or support them or give them some support – it was very minimal in

terms of financing them, but critical for the solar car team. I did the lobbying work that you would do to pass legislation, which is talk to the team members and tell them, "look, I'm going to build the legislation for you but you need to make sure you support it. What are you going to do?" And they're like, "petition."

"Great, do a petition." And they created around 1,400 signatures with comments – every signature will have some comments – from all across the nation. Some of them, actually, from Australia solar car teams, and from the university saying, "this thing should be funded and sponsored by the university." When we had the session at the Memorial Union lounge, the solar car team was wearing orange shirts and they were all there. It was one of my proud moments at the time. And like Brian really said, that was one of the best accomplishments and happiest moments in his year of serving at ASOSU because he saw we were doing a difference. Now, it was an advisory resolution, so the College of Engineering did not change their mind or decision, and I respect that. They had their own priorities in terms of what to do and they funneled students into other places.

So when I moved into the graduate representative, I did some work as well in terms of diversity, inclusion. What else? We passed a resolution about how ASOSU functioned. We fought against some resolutions that we thought would not help ASOSU function that right way. There were some discrepancies in the budget that I raised the red flag on and I highlighted them that these are not really the right way to do it, or at least there are some mistakes happening in the process. It really was great experience. I took it seriously as I really am serving a constituency and I think they deserve to be fought for, and it was a great experience.

One of the moments that really helped me to transition and understand how I can serve on a larger scale, there was a speak-out last year by students of color. And some of them, they saw that's what happening on the national scene, especially with Missouri, is also happening here but we're not doing anything about it. And I wasn't really sure how significant are these concerns, honestly, before I went to the meeting. President Ed Ray cancelled his engagement and he went there, and the idea was just listen to everyone, what they say, what's their struggles, and how they are experiencing college different from you. And it was filled with administrators, full of students of color, and majority students, whether white or American or others.

[1:35:21]

The leaders of the dialogue or the speak-out spoke, talked about ground rules, how to speak, what to do, and how people should listen to it, and they opened the floor and there was almost, I'd say, like thirty seconds, forty-five seconds of silence. So I was like, "let me go up on stage and just break the ice." And I said, "maybe the first one is the hard one, so I should just take that out of the way. I don't want to speak about myself, even though I am a Muslim American. I might be considered as a person of color, but I want to encourage you to speak and share your experiences, because if you don't share it, people will not know about it and its worth to say it, it's worth to let people know about it. And if you don't have any experience, just listen. And when you're listening, do it as active listening about not just being angry or defensive, think 'what could I do to bring a solution? What could I do to be part of a solution? Is there any influence that I can do? If things are out of my control, what influence can I do at least?'"

And I think that helped a little bit to encourage people. So people came out and spoke. It was devastating for me to see that some people are experiencing college different from me. I take it for granted to walk at night without anything on me and being safe. I take for granted that I'm a male, I'm a person who does not look very colored, so maybe I'll not be perceived as a danger and maybe might be a black person perceived as a danger. So I was very fortunate to really listen to those experiences.

There was some backlash. Actually it happened at the same time, I think, as the bombings in France happened. A few days after the attacks in France and the attacks in Lebanon; it was devastating. One of the students, he was presenting himself on Facebook as the student government president in one of the community colleges in Oregon, and he happened to be a student right now here in Oregon State. So he made a really bad remark about Muslims and I took that as, again, will make people feel that they are threatened, that they might not be welcomed; at least it's not a welcoming thing for them, especially when it comes from a leader from a community college in Oregon. I was like, "OK, we need to make him a good example, but I need to protect him as well if he had good intentions." So what I did, I just wrote a comment to him, it was a public thread on a public community, Overheard on Facebook, and I said, "I disagree with what you're saying. This is where I think your statements are not really good, especially from a leader like you who should be a good

example to make people welcomed. Your comments right now is not only just remarks, they'll make some Muslims not even want to go to your community college at your town. It's something that I feel should be reported and should be investigated, because you are a leader who should represent a welcoming environment for everyone. If anyone agrees with this, please send me your name from OSU because I'm going to make a resolution out of that at the ASOSU House of Representatives."

So I got some emails, people supported me with that, they said, "please, let me be a co-sponsor of it." And on the floor we had the state of the ASOSU speech by the president, and immediately after that I had my resolution presented on the floor. And I told people, "don't rush into it, let's have a second reading next week. But I want you to consider this: this time he said something about Muslims and Muslims are feeling threatened. Next time, it will be someone else. If we create this hostile community, this is bad. There is a way to report this and if I know, in the process of how to report this, I will do it myself. But students don't know about it. So that's why I'll keep his identity confidential but the resolution will be public. We'll say, 'these actions are going to be reported in steps A, B, C,'" so it was public for everyone to know how we were reporting it.

[1:40:05]

I had to be travelling in the next week and I had a friend to come as a proxy. She was a French graduate student; it was very good that she was there on my behalf. And they passed it, it got co-sponsored by many senators and House of Representatives of the student government. And long story short, I got invited by the leadership council for inclusivity, diversity and inclusion, which basically takes care of all of these issues on a larger scheme of the college. I'm one of the students who are representing on the council. We are considering the job description of the permanent chief diversity officer; President Ed Ray initiated this position immediately after these events happened. So I felt really proud, not about the small actions that I did, but about this community really getting together and passing something, stating something, and eventually we have this system really changing to make the life of everyone better and the experience of everyone a good one.

Now we had a backlash at the office of budgets that's going out of our pockets, and now we're paying more tuition. And I understand that that makes some students, regardless of their backgrounds, not able to pay tuition, and maybe they are losing their ability to continue in college or access college. So it's a continuous struggle.

What got me interested into politics was all of these stories, experiences, and incidents where we went to lobby at the legislature in Salem. So we met some senators and representatives. Our own representatives in Corvallis and Philomath, and some of them from other districts as well. And I felt there is some other ways to do business, I would say. It was just enlightening to me how they are doing their business and how they pass one legislation at a time; how they dismiss some really good ideas because they are not popular today, even though you can make them popular in a month or two month or a year, but because they are not popular today, they will not be leading the way to drive change. And that was where it struck me, "I think I can do better than just going one day a year and advocate on behalf of students." Yeah, that's basically my student engagement.

CP: And it also brings us today. We are in the midst of an election season right now, national and state, and you are part of it.

SA: I am. I am the Progressive candidate for state house representative for the seat of District 16, which encompasses Corvallis and Philomath.

CP: And what made you decide to throw your hat in the ring? I mean, you're a Ph.D. candidate and you have a lot of other things you're doing, but this is something else that you've tacked on to your day.

SA: Every session that I will have next year, if I get elected, is already booked in my calendar, and I have time for it. I believe it's the most honorable thing to serve people. If you asked me a year or two years ago, I would say, "this is crazy. I would never think about going for public office." When I was in fifth grade actually, I thought about it. And I looked at my dad, I was like, "I was born in the States right? So that makes me able to be a president." And 1998 was not the best year to look at a role model to be a president; it was not the best. So he looked at me and he was like, "son, there are many other things that you can do. You can qualify, but you don't want to do it. You can do other good stuff."

I might disagree with him right now. Maybe president is a crazy idea, but public service is an honorable job, especially for the position I'm going for. It's part-time, where you work six months, but you work very heavily through these six months. And after that you go back to your constituency, you're expected to do your own practice or farming or whatever it is, that's why they did these half-time sessions. And I believe if you are rich, you can afford it; if you are a farmer, you might be able to afford it. If I am a Ph.D. student who has done most of his classwork and only needs to do research, which could be done during the weekends – I believe I could get an extra year or maybe two without really impacting my academic progress – and at the same time represent Corvallis, whether it is my constituency that's really under-represented, under-heard or unheard, and also Corvallis at large and Philomath at large. It's absolutely a huge commitment.

[1:45:13]

What got me started is – many aspects. One of the sparks was when I saw a representative of another district hinting about getting his high school kid into a scholarship or fellowship – without naming that person, he's not from this district – and the president of the university that is located in his own district was there. So we consumed fifteen minutes, not talking about some bullet points that we were prepared to talk about for the higher education at large, we spent it listening to him bragging about his athlete child. I felt that was just disgraceful, unfortunately.

And I do have respect to many of our legislators. One of them is my opponent. When we met him he was very gracious, you know, like "what's your points? What are you going to tell me? What are you going to sell me today? I know you have some points?" He was very communicative, telling us what is possible to do, what is not possible to do. But at the same time, I saw a little bit of myopic vision in terms of what changes we can do, not only as a personal vision because of him, but also as a partisan. Sometimes politics plays its way in and the interests of the people is not there. So that was, when I ask about corporate tax and I hear back, "it's not really supported, nobody will support it," back then, right now we have a measure on the ballot where corporate tax is going to be there. Where I would ask, "what do you think about PERS? Can we do this and that?"

"No, we can't do this and that about it." So I feel sometimes we can question assumptions and politicians have many assumptions taken for granted. As an engineer, I don't put any assumption to rest until I question it, especially if it could change the system to the best or it could find some vulnerabilities in our system that could be exploited in the future. So that's where I was just very moved by that; lobbying one day is not enough.

On the side, I have another hobby. You know about Humans of Corvallis? I took the project from another student who graduated, he got a job in Amazon, the company, and there was a newspaper article about him. So I messaged him, I was like, "you're leaving town, right? Are you passing the project to anyone?" He was like, "no, why are you thinking of that?" I said, "I'm thinking about taking pictures of people," I do not take portraits usually, I like photography.

So we met. Humans of Corvallis is a project inspired by Humans of New York, a famous photojournalist work where you take a picture of a random person on the street and you bring their story – after you ask them some questions, you put their story together. So I did that for two years after I took over the project from him, and why this is related to politics, I thought Corvallis is very...something that is just the same; not meeting everyone I want to meet. So I saw on Buzzfeed a blog that a guy that took the train from L.A. all the way to New York with a very cheap ticket, like a few hundreds. So December, I decided to take the train from Albany or Corvallis, like I took from Corvallis to Albany, Oregon, and then all the way to New York.

On and off the train, I would interview random people for my blog and I plan to do a book out of it, a photo book, which is "What did the FOX Not Say?" capital F-O-X. There is two puns there. The first pun, there was a song, "What did the Fox Say?" And what did the fox not say? The other pun is not about Fox News only, which I have a personal opinion that they are biased, but it's about the media at large, they have some bias where they bring you a story about a person, but the story serves a direction. The story always serves what they want to tell you, and sometimes they don't tell you the story as it is. And that is the pure beauty of Humans of Corvallis, Humans of New York and many other projects, where you go with almost no bias and you interview the person and bring their story to light.

[1:49:46]

So I went on that journey, interviewing people on and off the train, asking them some random questions. And I had a couple of questions – I was considering running for office, and I had this question, "if you ever run for public office, let's say you will do that in twenty years, what advice will you give yourself? I want you to think about it, what advice will you give yourself?" What people consistently told me, the most frequent advice is honesty and be yourself. As simple as it is, as hard it is for politicians to accomplish these two. So I knew what's really the basic foundation of public office holder is really to care for the people and to be honest, to be yourself for what you want to do. And that's where I was like, "yeah, maybe I need to do it."

Especially when I meet Grace in Denver; and actually we were motivated to meet her because of her work, she used to do counterterrorism education in learning center or museum-like center. And we wanted to ask her some questions. My friend who was with me there thought they were biased a little bit, so we were like, "can we talk to you? Maybe interview you?" And she was clear, "whatever I'm going to tell you is not going to reflect my work, I'm just representing myself." So after we gave her some feedback about the learning center, we started asking her life as a person, random person, for my book. And I thought one of the question would be very applicable: have you ever been terrified in your life? And she gave me instances when she was in Morocco and followed by some men, and some other instances when she was in a neighborhood she only had her brother, who was acting as the man scaring people not to break in and steal stuff, and he was a kid at the time, but he had to act as the man of the house.

And another incident where her mom had to have a lung transplant and, in her words, she was the most beautiful woman she ever had in her life. She took strays out of the streets to feed them, to give them shelter. Because she was poor she couldn't stay alive and get the lung transplant. She passed away because of that. And I saw the tears out of her eyes. My journalist in me – I did not have the camera at the time, my friend had the camera, I was looking at my friend, "take the picture," her eyes were wet. But my friend was wiser than me, she was like, "no, you need to embrace the moment; you let her embrace the moment, respect her time." And I had to hug her and thank her for sharing, and we continued speaking about all of the things she was concerned about. And one question I asked her, "what do you think about the senator who voted against the health reform bill that could have gave access to your mom? What would you tell them with your story?" She's like, "I'm not going to be able to change anything, they don't care about my mom, it's just a number and the numbers don't add for her. The senator will be motivated for other motives." And that's really just shown me the link between people's stories and me acting as their megaphone but also doing what's right for them. And that was the deal-breaker for me, "I have to run for office," and that's how I took the decision.

CP: Well, a couple of concluding questions for you. You are involved in so many different things – you have the public service side, the engineering side, the business side – what is your vision for yourself for the future?

SA: I want to help people and be the one who really keep himself busy to make a difference. My mission actually, not vision, my mission in life – I wrote back in 2007, probably need to review it after ten years or something – was to work hard with productive people to make the well-being of people efficient, productive and content. This is what I believe is what makes me move, whether I translate language for others at the Language Center or work with them to navigate through the hurdle that they have, I'm making them more efficient, more content. And whether I go to public office and pass legislation or bring awareness to issues it's, again, making sure I have the biggest impact to make people content, to voice the concerns of people that, whenever they're not heard, to make their lives better. It's a question I ask people, "where do you see yourself in twenty years," and they stumble on it and I believe they have the right to do that.

[1:55:00]

I thought about myself in ten years, in 2017, I'll be a CEO of a very successful company; I'm a CEO but not of a very, very successful company. I think in this politics scene, I should show myself as a very successful person even if I'm not, but I think honesty is more important. I am a CEO of a company that's learned a lot, we have a huge reservoir of knowledge, but still I did not manage to have a sustainable system that is resilient to any changes.

I had the vision to have a family and kids, I think I still did not establish that and maybe it's too early for me to have that right now. I think I'll see where the road goes. As long as I have my eye not on the prize, eye on what makes me feel content, I feel I'm on the right road. My research – my brother just told me that when he came here and he helped me knock on some doors when he was visiting. He enjoyed seeing democracy in the United States; he's American but he lives in Saudi. And while we were walking he told me, "Sami, this is what you do every time. For your Crispy Science

you make kids feel better and be better in their lives, be better at school. When you did your research for emergency management, you wanted to make people better. And when you ran for office, this is to make people better." So I think I have the right direction, I see the light at the end of the tunnel. I can't really draw it right now. I'll be surprised by what I will do; it will exceed my expectations definitely.

CP: I have no doubt about that. My last question for you is one that we've been asking a lot of people for this project and that is just to give your sense of where OSU is right now as it looks towards its 150th birthday. You've been here for a few years and have, I'm sure, been witness to a fair amount of change during that time, where do you think OSU is going?

SA: It's going to an amazing opportunity that we should start getting right now. A public university, it was intended to serve the public, the people, starting from farmers going up and down to all walks of life. One of my concerns that are the most important stories that I heard from my public office campaigning was a successful business owner telling me about his kids – fourteen, fifteen years old – that he might not get them to OSU, they might go to a community college, because they can't afford it. So I believe we are now at a very important point, not only as a university but as a nation, where we need to stand true to the idea that a public university is knowledge for all, where anyone who wants to learn can access it. This is a challenge we have.

I believe we will have more servers than people on campus. What I mean by that, servers, computers, technology that will connect people. You might be part of OSU community while you're doing your farming in Thailand and I think that's part of where we will go. Maybe to serve the tax payer better we need to relate more to what Oregon is doing, and that is what I think we are doing very successfully compared to other community colleges and universities. We make sure that we connect to the community and to the industry. We have industry partners for many of the programs and we have very astonishing accomplishments for research that is driving businesses. Entrepreneurial work is growing hugely here, especially techno-entrepreneurship, where research transforms into business, and I think that's a great opportunity that will grow with time and I see it succeeding very greatly.

Oregon State University in its 150th year, now we are a little bit short of the 150th year, is really a pioneer. The people who I know graduated from Oregon State University, they are passionate, they are humble, and they stay true to themselves. Whatever they do, they have this sense of community first before anything else, before my degree, before my competency, before showing off what I can do. It's really making sure that you stay grounded, you stay connected to the people. I don't know, maybe it's Corvallis, maybe it's Oregon, maybe it's Oregon State University, maybe it's the combination of all.

We need to embrace diversity more, because we are not embracing it enough. We're doing lots of good work, probably pioneering work compared to other places in Oregon and in the nation, but we can do much better. My biggest fear is that as universities transform in the twenty-first century, I don't know if someone is watching this in the next fifty or twenty or maybe 150 years, they understand university differently and we need to see that. Not see it and anticipate it, we need to create it. MIT did that brilliantly; they know where the education is going, where the society is going, not because they are anticipating it only, they are creating it. I believe we can do much of that. If we do that, we will be doing much more fulfilling work for a university. So maybe we need to find what the university will be in the next 100 years and create it, and I hope I can be part of that.

CP: Well Sami, I want to thank you very much for this. This has been a very valuable contribution to our project and I wish you nothing but the best going forward.

SA: Thank you, it's an honor and I appreciate the time and I hope it to be a service to this community. Go Beavs.

[2:01:06]