

NARRATOR: Welcome to 'Intersections: The RIT Podcast.' People seeking a career in medicine have many paths from which to choose. Today, Hamad Ghazle, professor in the College of Health Sciences and Technology, and Jodie Crowley, clinical coordinator for the Diagnostic Medical Sonography Program, discuss career opportunities in the field of ultrasound.

HAMAD: How did you choose ultrasound? Why did you choose ultrasound?

JODIE: When I was in high school, I was looking at different programs. And I was actually looking more at physical therapy. But when I figured out that you had to do a cadaver dissection, I decided that was not going to be the route that I wanted to go. So, just having a sibling here at RIT and walking around campus, I saw the program sign on the door. I took some interest in it and looked it up and figured it was medicine, it was where I wanted to be, but I wasn't doing cadavers.

HAMAD: I'm slightly opposite to that. It's not just cadavers. How did I get into ultrasound? It actually was a coincidence. Very highly coincidental. I was in a meeting and somebody started talking about ultrasound – look this is going to be the profession of the future. I was like, 'Wow!' I was intrigued by the discussion. I was intrigued by the way this profession works according to the little bit of information given to me by those two individuals. And then I researched it. And that's what I wanted to do at that time because it sounded so interesting to me at that point. I really got into it because it's a blend of so many things. It's not only that I'm very intrigued by the human body, the mysteries of the human body. But at the same time with this, this is an embodiment of so many professions and so many things: mechanical engineering, industrial engineering, electrical engineering, computer engineering and, on top of that, medicine. What else do I want? This is how I got into it. And then I made the move to come to RIT and it seems to me I never left. I'm still here.

JODIE: I feel the same way at times, Hamad. I left for a little while and gained very valuable experience working at the University of Rochester and learned a lot that I was able to bring back and join you here a few years later with.

HAMAD: You see this whole transformation that's happening within the field that also gets given back to the students. It's just great. So, our profession has done very well. It has involved, has improved. The new technology – think about it. The ultrasound equipment used to be like monsters – they were huge.

JODIE: We call them dinosaurs in the lab.

HAMAD: Dinosaurs! And now we have handheld ultrasound systems. We understand that each one has their own advantages and disadvantages, limitations and all that stuff. But this is the evolution. Think about where ultrasound is going to be in the next few years where the stethoscope will be replaced with an ultrasound unit. Come on. Your cell phone is being used as an ultrasound system to look inside. This is excitement. The excitement in this field and what it's providing ought to be delivered,

ought to be transformed, ought to be moved to those students and say, hey, this is what it is. When students see that, when students see the excitement, when students see the passion, when students see what you have in there, they will carry that. Over the years, we have somehow developed an environment that is really conducive to listening. So, we've become listeners as well. We don't want our students to be just sitting there listening to us. We want them to provide input because we want them to be part of the program, we want them to mold this program and improve it and advance it. By doing this, we feel that the students say, 'Oh yeah. I can say this. I can provide this input. And all of the people in the program are willing to listen and are willing to actually take our input and do something about it.'

JODIE: Absolutely. I was just talking to the freshman class the other day. They're all sitting there very, very quiet, and I walked from around the podium, walked right up to them and was like, 'We expect you guys to talk to us. We want to hear what you're thinking about. We want to hear what your questions are. We want to hear about what's going on because that helps us to teach you better.' And the class dynamic has changed so much from that day; it's been wonderful. Now I walk in, and they're chit-chatting with each other. And they'll ask me a question about what we're going to scan for the day or what's going on or what's the next topic. And I think it's a good environment that we're producing for our students to be able to start to pull them out of their shells a little bit and help them become better professionals. Some of our best professionals in ultrasound are the ones who are asking questions of their patients and asking questions to be able to do the best exams possible.

HAMAD: We do not just go in there and teach where they come and sit and listen to me in the classroom. Right? We talk about innovation, we talk about creativity, we talk about collaboration. Again, I keep talking about respect because respect will produce these types of things. And at the same time, you see them – it's like, oh my god, I cannot describe it. I cannot describe it when you see somebody responding in a way that makes you deliver more. You want to give more. You want to give more of yourself to these people.

JODIE: I think they get to be totally different, too, when they feel like they can have a conversation. And I have the opportunity a lot in the laboratory to work one on one with the students where you can see if they're having a bad day – you can tell by the look on their face. Things aren't clicking with them and it's like, okay, take a step back. Let's see if we can find a different way to teach this to you because you weren't getting it the way that 95 percent of the students were, but that doesn't mean you don't deserve to learn the information. That doesn't mean you don't deserve to have the individualized attention that you need to make sure we as a program are getting you to the right place. That's really received well by the students. The like to know that if I don't get it this way, I'm allowed and encouraged to ask the question and say, 'Hey look, I don't get this. Can you show it to me again? Can you help me with this?' And that means a lot to them.

HAMAD: The goal in mind is, of course, we want them to pass their boards, we want them to be certified, we want them to do that. But, at the same time, we want them to

stand out. If I have three or four people being interviewed at the same time, surely, I want our graduate, our student, to stand out, right?

JODIE: Absolutely.

HAMAD: That's the goal. And that's what we do. These are the extra things that we do to make those guys stand out. This is what students tell us. This is what graduates tell us. They come back to say, 'I was interviewed here and I was offered the job on the spot.' That's very satisfying. But you know what? That's more satisfying to the student because they feel that their education that they've received here...

JODIE: That it's paid off.

HAMAD: Yes!

JODIE: They know they've worked hard for four years. And our students don't say that they have to go to class, they actually want to go to class. And I find that very satisfying because we want to have an environment that is welcoming, and the students feel like they want to be there. It's not a chore. It's not work for them to come to class during the day. They enjoy being there. They want to be there. I think as professionals, when you like what you're doing and you want to do it, you do it better. I like what I'm doing working here at RIT. I love teaching ultrasound. If I didn't, I would find it a struggle to come every day. It's great to see that our students find that same reward already.

HAMAD: Exactly. It's all about joy. It's joy.

JODIE: They've got to like what they're doing.

HAMAD: Exactly right. It's a joy. We have graduates who have their own businesses in ultrasound. We have graduates who are supervisors. We have graduates who are managers. We have graduates who are sonographers. But you know what? From my interactions with them, they love ultrasound.

JODIE: They do.

HAMAD: They really love ultrasound. And those graduates are also becoming part of this whole community that we have, the ultrasound community. And not only that, but we see them coming back to help us.

JODIE: Absolutely.

HAMAD: Graduates are not just there and then they leave. They never leave. They come back to help us in classrooms. They help us in teaching. They help us to actually instruct students in the clinical sites.

JODIE: Absolutely. And I think that our clinical sites are improving so much because the graduates that are there now instructing our students, they're like, 'No. We were students. We've been through the program. We know what the expectations are.' And they don't let them slide. They hold them to high levels of expectation, which I think is producing higher-level graduates. It's just increasing in bringing back to us and giving back to us. And I think our graduates are so thankful for the opportunities that they were given when they were here. They're very welcoming to paying it forward. Somebody asked me one time, if I liked working with patients so much, why I gave it up. And I didn't think I gave it up. I just took a different turn on it. Because I saw that if I could educate the next round, the next generation of sonographers to a high quality and a high level, instead of me seeing one patient an hour, all 30 of them would see one patient an hour. Then the year after that, another 30 would be seeing a patient an hour. The effect that it would have by just a drop of water, so to speak, in the bucket with all the ripples and the rings that can go out, we are helping our community. We are giving back so much more by being able to produce sonographers at a very high moral and professional level to the fact that it would be more that we could give back than just you or I being in there and seeing a patient every day. We've been able to instill this into our students, and it's definitely raising the bar for healthcare.

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