Melanie Cole (Host): Welcome to the podcast series from the specialists at Penn Medicine. I'm Melanie Cole, and I invite you to join us as we introduce Dr. Cara Cipriano. She's the Chief of Orthopaedic Oncology and an Associate Professor of Orthopaedic Surgery at Penn Medicine. She is here to speak about her position as the only female joint replacement surgeon at Penn Medicine.

Dr. Cipriano, I'm so glad to have you with us. I love this topic. Can you tell us a little bit as we begin about your role as the Chief of Orthopaedic Oncology at Penn Medicine? And provide a little background on the lack of female representation in orthopaedics. Traditionally, this is sort of a male-dominated field. What led you to pursue this specialty?

Dr. Cara Cipriano: Hi. Thank you so very much. It's great to be here and a topic of great importance to me as well. I actually didn't become interested in orthopaedics until fairly late in medical school. I was interested in general surgery. I loved working with my hands and taking care of patients. But I hadn't really thought much about orthopaedics until later on and was exposed to the field almost by accident and found that I actually loved it and ended up learning more. And the more I learned, the more aspects of it appealed to me. I ended up pursuing orthopaedic oncology and joint replacement. And I think both of these are particularly meaningful ways to help patients with a focus on their own goals, getting them back to the mobility, the function, and the things that are important to them.

Host: It really is a great field that you're in. And as more women enter this traditionally male-dominated field, what do you see as some of the barriers to other students, medical students and females, getting into orthopaedics and even orthopaedic oncology? Tell us a little bit about that.

Dr. Cara Cipriano: Well, I can say that from my observation as well as the research that I've done, that when students come to medical school, much like myself, they have preconceived notions about what orthopaedics is and who does orthopaedic surgery. And those are stereotypes that they're exposed to before they enter medicine, but can be perpetuated by experiences they have in medical school. And this is our opportunity to show them that to be an orthopaedic surgeon, you don't need to be over six-feet tall, or male, or Caucasian, or any of the features that we have found people associate with our specialty. And in fact, our specialty will benefit once we begin to attract a more diverse group of future surgeons. So that's one of the things I focus on quite a bit as the Director of Undergraduate Medical Education here, to make our field interesting and accessible to students of all types.

Host: One of the things I find most interesting about this discussion today is how more women in the field will benefit the specialty itself and patients ultimately. Tell us a little bit about that from your perspective.

Dr. Cara Cipriano: Absolutely. So we actually have quite a bit of data on the benefits of diversity, not just within medicine, but beyond. And it's been shown that diversity helps improve the talent pool in a field. It helps with decision-making because we make faster, more fact-based decisions when we're a diverse group. It certainly helps with innovation because of different experiences, perspectives, and approaches to problems, and you have more patient or customer insight in addition to more employee satisfaction and other benefits as well.

So in specific to medicine, we've seen that there may be advantages when there's concordance between patients and their physicians. So for example, a female patient being treated by a female physician or underrepresented minority patients having concordance with their physicians. And there are many reasons that may be the case, but it's a pattern that's come up repeatedly in the literature.

Host: Dr. Cipriano, I'd like to discuss your philosophy of care. As a woman, we sometimes have different ways of approaching care. And as you are now the Chief of Orthopaedic Oncology at Penn Medicine, tell us a little bit about your approach.

Dr. Cara Cipriano: I believe it has to start with the patient. When I see a patient, I like to understand who they are, where they're coming from, and what's important to them. And my care will be focused on getting them back to the things that matter to them, whether it's more mobility in order to be able to exercise or play with their grandkids or attend a loved one's wedding. And once I understand that, we can help figure out what the best treatment option is, whether it's surgical or non-operative, and to help them achieve those goals with minimal risk and inconvenience based on everything that they have going on in their lives.

Host: Before we get ready to wrap up, is there anything that you're working on to help diversify the field of orthopaedics? And what advice would you give women looking to enter the field of orthopaedics and orthopaedic oncology?

Dr. Cara Cipriano: This is a topic that's very near and dear to me. And I would say that one of the most important things I do in this respect is my work with the medical students. I think it's very important for them to have the visible representative of our field be someone who is not the stereotypical orthopaedic

surgeon in terms of their demographics. And by engaging the students and showing that we are a welcoming environment, where really everyone is valued for what they bring to the table, we'll help to attract the diverse applicants that we need to make our field better.

Additionally, here in the Department of Orthopaedics at Penn, we have just created a scholarship to improve representation in orthopaedics. Essentially, this provides funding for students from other institutions to come spend a month rotating at Penn Medicine during their last year of medical school as a way for them to get to know our program and decide if it might be a good place for them to pursue residency training.

I also perform research related to diversity in our specialty, in particular investigating the barriers to women and underrepresented minorities entering and achieving in this field of orthopaedics. And I do all of this in the spirit of identifying actionable areas for improvement. I truly believe that our field is filled with good intention and people who would like to see increased diversity. And at this point, we simply lack the understanding in order to make that difference. So that's one of the things I'm actively working towards through research.

And finally, with respect to advice for women considering orthopaedics, I would say that this is a great field. It's so rewarding the way that we get to take care of patients. And we have wonderful colleagues, both men and women, and I would encourage you to explore it and don't let anyone tell you that you can't do it because of your gender, your size, your color, or any other reason.

Host: Well, I certainly agree with you and thank you so much, Dr. Cipriano, for joining us today and telling us about your role as a female joint replacement surgeon and the Chief of Orthopaedic Oncology at Penn Medicine. To refer your patient to Dr. Cipriano at Penn Medicine, please visit our website at pennmedicine.org/refer or you can call (877) 937-PENN.

That concludes this episode from the specialists at Penn Medicine. For updates on the latest medical advancements, breakthroughs and research, please follow us on your social channels. I'm Melanie Cole.