Dr. Chief: So, Manuelito Chief is getting his Master's in Electrical Engineering. Come closer, don't be scared. So we're still six feet away. And he's getting his Master's of Science in Electrical Engineering, and so he came about two and a half years ago to be part of IndigeFEWSS from University of Denver where he got his Bachelor's in Electrical Engineering. His advisor is Dr. Kelly Simmons-Potter, and Dr. Simmons-Potter sent her regrets, but she is in the midst of administering a comprehensive exam right now. So, what she said is, "First, I would like to extend my congratulations to all of our IndigeFEWSS graduates. I'm particularly delighted to celebrate Manuelito Chief's Master's degree in Electrical and Computer Engineering, and I am proud of his accomplishments. Manuelito's work focused on the resiliency of commercial organic photovoltaics modules, and utilized a testbed that he constructed at our in situ outdoor testing facility, the TEP/ ArizonaRISE Photovoltaic Test Yard. Through his work, Manuelito demonstrated the challenges to sustain PV power generation and efficiency in these types of systems. His work resulted in a highly regarded conference proceedings publication and a journal publication that is currently in preparation. Further, the testbed that Manuelito developed and the software that he wrote to enable remote data acquisition will be used by future IndigeFEWSS students and scholars to support continuing study in this critical research area that's being impacted by rapid innovation. Congratulations Manuelito! All of us in the Potter research group and on the IndigeFEWSS team are confident that your future will be bright and we wish you great success. Congratulations!"

So, would you like to respond and share with us what your plans are post-graduation?

Manuelito: Yeah, right now I'm still looking for a place of employment. I'm looking at utility companies. I think eventually I would like to work out at the utility company on the Navajo Reservation. So, right now I'm just looking at opportunities with utility companies both here in Arizona and also in New Mexico, but I did get an email recently with the National Lab, so there's another opportunity that I might look into, and there's also a consulting firm that's in Albuquerque, New Mexico, and they do consulting a lot with the

utility company on the Reservation, so there's just some opportunities I'm looking at right now. Dr. Chief: Wow, so it sounds like you're going into industry? Manuelito: Yeah. Dr. Chief: Good, good. Well, how did the IndigeFEWSS training program impact you? Manuelito: For me, it was a really positive experience, because looking back, if I wasn't in the fellowship, I would have probably just stayed within my own bubble there on the ECE Department. But being in the program allowed me to meet a lot of great individuals and collaborate with a lot of people, and if I wasn't in the program I also wouldn't have been able to see how my research kind of impacts the community that I grew up in, so I am really thankful for the opportunity to be a part of the program. Dr. Chief: And could you share about your educational journey about how you came into electrical engineering from a young age all the way to presently for our viewers? Manuelito: Yeah. For me, I guess my interest in electrical engineering goes back to probably when I was eight years old. Growing up on the Reservation, my family used to visit my great grandma, and she lives deep within the Reservation. And at the time, she didn't have electricity and I kind of always kind of like questioned like why she doesn't have the electricity? And like why do we have electricity? So, I guess like those questions kind of gave me a curiosity to study electrical

engineering, and that kind of leads into me like coming here and doing research with the solar. Dr. Chief: Great, and could you give some words of advice or insight for our current trainees and what you would like to share with them in terms of their program - entering and finishing their program? Manuelito: Yeah. For me, I would say

be a part of the community outreach opportunities that Cara sends out quite a bit, because being a part of the program, I say that those were the highlights of the program, and I really enjoyed being able to participate in those. Dr. Chief: Could you share a little bit about those community outreach activities that you were involved in? Manuelito. Yeah. One of the opportunities I had was with Tuba City Greyhills High School. It was kind of like a quick decision to go out there. But Chris and I, we went out and taught the same modules that we did at Diné College. We were able to speak with them about like our own respective fields, about like - I spoke with them about solar and about how that relates to food, energy, water systems, and we just kind of - the program that they have is a STEM program, and they were kind of looking at science fair projects and developing kind of ideas of what they could do that they could enter into a science fair. So, Chris and I went over there and we just spoke with them about what our fields are and kind of brainstorm at what directions they could go with their own projects. Dr. Chief: Great, thanks for sharing. And I know that you also did an internship during the pandemic at the very start. Manuelito: Yeah. Dr. Chief: Where did you do your internship and how was it like doing an internship during a pandemic? Because most of our trainees actually didn't do an internship last summer. Manuelito: Yeah, at the very beginning it didn't look like I was going to have an internship. I did an internship at Salt River Project, which is the utility company out in Tempe, and at first we weren't thinking I was going to have an internship just because of the pandemic, and it wasn't until July that I got confirmation that I could - that they would take me on and kind of work remotely, and it was kind of an interesting experience because a large portion of that internship was just working remotely. And I did get the opportunity to go to their generating facilities probably once or twice a week and just kind of see what projects that they have and just learn from them. Dr. Chief: Great. What about your research? Could you tell us more about your research? Dr. Simmons-Potter talked about your work on resiliency with organic and photovoltaics. Could you explain to the viewers out there about your research? Because organic photovoltaics is not very common. Manuelito: Yeah. Dr. Chief: And how that's important for communities. Manuelito: Yeah. Part of the lab that I have with Dr. Potter - we do a lot of field studies, and the past studies that have been performed are primarily with silicon-based photovoltaics, but the research that I'm doing is with organic photovoltaics and we're interested in the application of how the photovoltaics will perform here in Tucson. And yeah.

Dr. Chief: Great. Any other questions from the viewers or any of the new trainees? Or past trainees wanna ask the questions?

I think everybody's getting used to like talking in person.

Well, thank you so much Manuelito for being part of IndigeFEWSS. We really appreciate all your contributions, especially to the learning modules, which as you know is continuing on this summer, and being piloted June 1st to the Sept. 4th with Diné College. And we wish you all the best and enjoy the commencement tomorrow and this weekend, and we're really proud of you. Congratulations!