After working on the development of a sophomore/junior level laboratory experiment for Metropolitan State University of Denver with Dr. Richard Krantz, I was encouraged to give a poster presentation at the regional AAPT Conference on my campus in addition to presenting at MSU Denver’s Undergraduate Research Conference. The research is an acoustical system with which students are able to interact and understand the concepts behind wave transmission and reflection theory. The system is a desk top, classical analogue to other physical systems such as electrons passing potential barriers, one dimensional atomic chains, Bragg grating in coaxial cables and more. One of the main benefits is the affordability, accessibility to many schools and it provides a cool way for students to learn about some vital physics knowledge. These, along with encouragement from Dr. Krantz and Dr. Vincent Kuo of the Colorado School of Mines were the motivation to apply for travel funding to present at the National AAPT meeting.

While the other conferences helped tear down some of my presentation jitters, the AAPT National meeting offered a new set of experiences and skills. Not only was I able to present in front of others from all around the country, but I was able to see others present their own research. Being that it was a more extensive conference than any other I had attended, I really could soak up what I felt it meant to give a good presentation. Seeing others present in depth material in an elegant manner inspired me to attain that same level of skill and grace in my own presentations in the future. Getting over the nerves and doing it for the first time in a big conference was the first step in that direction, and it had a large impact on my confidence and outlook on presenting. Giving a good presentation is not only beneficial for my career, but is part of opening the dialogue to those around you as well.

Seeing others’ presentations made it very apparent to me that a good presentation is only the start to a more in depth conversation with those who are interested. In one of the talks I attended by Dr. James Gates of the University of Maryland, he mentioned one talk he had given at one point in his career in which no-one asked any questions. His response was that he must have given a horrible talk. While I am skeptical that is the case, this small comment shifted my perspective toward the fact that a presentation should always be the beginning of a conversation and not the end. In school, it is made out to be that you finish what you’ve done, present, get your grade and are finished. But, being asked questions and talking with others about what you've done and why it matters following the presentation is crucial to me now.

This new outlook drove me to meet even more people while at the conference. Networking was one of the main advantages of the conference. It is not possible to name all of the connections I made, but it is possible to highlight a few of the ones I considered most influential. One person in particular I was hoping to meet was Dr. Steven Pollock from the University of Colorado, Boulder. I had heard of his contributions to Physics
Education Research (PER) and was intrigued to have a chance to potentially speak with him. Attending one of his talks and stopping to ask questions afterward gave me exactly the opportunity I was hoping for and having the talk be a lead in to our conversation made the prospect more attainable and comfortable. I was also able to connect more with Dr. Vincent Kuo who later recommended me for a job with Pearson Education. Another person in PER, Daryl McPadden from Florida International University, later asked if I’d be want to be in an article featuring recent graduates who are interested in PER in their school newsletter. All of these conversations and connections got started through either presentations or through introductions from one connection to another. After all, it seems that in this world connections are everything.

That is one reason I was particularly thrilled to attend the meeting with another student from another school, Libby Booton from Colorado School of Mines. Since we were able to go together, it not only made the journey more comfortable, but also more fun and more beneficial to the overall experience. We were able to practice our presentations with each other during the night after most of the events had dwindled. This allowed us to give the presentation to another and gain insight as to what we could improve for someone who had no previous experience with the topic. In addition to moral support for each other, we were able to discuss important topics such as SPS recruitment and fundraising ideas each of our chapters have tried, internships that we each had pursued, comparisons about our schools programs and what we plan to do in our careers. Each of these gave a platform to develop not only a professional connection, but also a friendship. Sharing information with each other and also experiences such as sightseeing during conference downtimes gave an opportunity to get to know each other even further. We were able to visit the Smithsonian’s National Air and Space Museum in Washington D.C. which was a bit of fun in addition to all of the career building. Another important discussion we were able to have was about graduate school. It had been a decision of mine to continue on in academia, due to my long term goals of being a professor. Knowing that graduate school was in my future, I was able to talk with Libby about the things I had learned about graduate school, GRE’s, stipends and provide her with lots of information she had not previously known. Since she had planned on going straight into industry, we both were able to see a different viewpoint on what our career options were from there and consider all of our options. However, my desire to continue only strengthened through the conference and that made the fact that I presented even more important. Having a decent portfolio has helped ensure that I would be able to continue. I was recently accepted to the Condensed Matter Physics PhD program at the University of Denver, partly because my experiences at the conference have helped shape my thoughts and drive toward pursuing my career in addition to building onto my
resume. I do believe the conference was inspirational to me and helped me solidify my passion for teaching. That is something I will take with me for the rest of my life.

I was also very pleased with the effect it had on fellow students in my department. I think it’s fair to say that I’ve had lots more engagement with other students in my department about the project I was working on, and not in the way I expected. Not only did students want to talk to me about the work that I had done, but they mentioned work they wanted to pursue and asked me questions about the conference. The content of the conversations I had with other students were filled with intriguing ideas and getting involved further than just in classes. I was extremely pleased to share about my experience with them and get them excited about being involved in something other than class. It seemed to be an opportunity that students and professors were happy to see happen in our department. Since then, our SPS group has worked toward getting students to more conferences to participate in. A recent success was a group of nine students and one faculty member attended the APS conference in Salt Lake City. There are also future plans in the works to attend PhysCon in Silicon Valley. While I can’t take responsibility for these things happening, I do feel that my attending the AAPT conference provided some inspiration for other students to aim high and participate in ways I had not seen before in previous years.

In general, attending the meeting provided me with so many insights about what going into this field will look like for me in the future and how to ensure my success. I am extremely grateful for the AAPT and MSU Denver for providing me with the financial assistance to attend, for without it, I would not have been able to participate in the eye opening and life changing event. So to conclude, I’d like to personally thank the AAPT and MSU Denver for a truly wonderful opportunity. I am excited to have become a part of a community that I hope to participate in for many years to come.