

Where Are The Women?

By *Giants of Electrical Science* Playwright Neil Spencer

At our very first meeting to discuss the *Giants of Electrical Science* play, the Director of Education at the Adventure Science Center asked me if I could include the contributions of women electrical scientists in the show. “How about the electrical contributions of minority scientists, too?” she asked.

“Sure, I can do that,” I said, “No problem!” Little did I know at the time just how difficult it was going to be to fulfill that promise.

I knew why the educators at the Science Center thought it was important to present women and minority scientists. I agreed with them. Even now, in the early Twenty-first Century, although we can find both men and women in science, although we can find people from all different nationalities and backgrounds in science, when we hear the word “scientist,” we almost all imagine a white man in a lab coat.

The problem with this pervasive image of scientists all being white men, besides the fact that the picture is now completely inaccurate, is that this vision of who a scientist is can be a very discouraging and disheartening one if you don’t fit that picture. If we only view scientists as white men, then we are less likely to encourage girls, or students with different ethnic backgrounds, to pursue their dreams of becoming scientists.

The Adventure Science Center is about making science exciting for all people, not just white guys. Like I said, I agree with them. Science is for everyone.

As I got into my research for *Giants*, I discovered that I was in trouble. *Giants of Electrical Science* isn’t just about the science of electricity; it is also about the history of electricity. The concept for the show called for presenting the four scientists who had the greatest impact on the development of electrical science. The developmental phase of electricity as a science was basically from 1740 – 1900. During that time, all of the major

electrical breakthroughs and inventions came from the work of white men. “Where are the women?” I cried. “Where are the scientists of color?”

The sad fact is, that during the development of electrical science, women and ethnic minorities were almost completely shut out of the world of science. Not only were they denied scientific opportunities, but educational opportunities of any kind were very limited. For more than half of the target time period, slavery was still practiced in the United States.

What a tragedy! Who knows what fantastic scientific inventions and discoveries could have been made if over two thirds of the potential scientist in the world hadn't been denied the chance to be scientists? Thank goodness that more and more scientific opportunities are now opening up for both genders, and for people of all backgrounds.

I dug a little deeper into the history of electricity. I was delighted to find that there were some women and scientists of color who fought through prejudice and stereotypes and made significant electrical contributions. However, while their contributions were important, they were not as essential to the development of electrical science as those of some of the white guys. This was going to be a big problem for the show.

What was I going to do? Obviously, to be true to the history of electricity and to the concept of the show, I was going to have to focus on the white scientists who made the greatest contributions. But, there was still that promise I had made to the Adventure Science Center.

It wasn't easy, but I am happy to report that I did find a way to fulfill my promise of including some of the contributions of women and minority scientists. I'm not going to tell you how I fit it into the show – I don't want to spoil the surprise. Although it was a difficult challenge, including these contributions made the play better, because it starts to erase that picture of scientists just being white men. Besides, the solution made the play a lot more fun, too!