**Biography**

Julie B. Ealy is an educator and a researcher having taught for 52 years, middle school science through graduate chemical education. For twenty-two of those years she has taught at the university level and has been involved in research, both educational and computational chemistry with over 25 undergraduate students. The diversity of her undergraduate students provides an exciting educational environment and an opportunity to mentor students of diverse backgrounds. She hopes that her many years of experience positively influence her students and that she serves as a role model for them.

**Position Statement**

Four years ago I submitted my position statement to become a member of the nomination committee for Presidential candidates of Sigma Xi. I was elected to the committee and served three years. The second year I served as deputy chair and the third year as chair. I loved serving on the committee and talking to an impressive list of potential candidates who had the mission of Sigma Xi foremost in their minds as they presented their goals if they became President of Sigma Xi. I had the opportunity to work with other members of the Presidential nomination committee, some of them former Presidents of Sigma Xi. Many of them served as my mentors though they were not necessarily aware of that role and I thank them. I learned a great deal from those mentors and other members of the committee. When there was position available for Associate Director to represent the Northeast region, I knew I wanted to continue to serve Sigma Xi. I felt like I had only just begun to represent Sigma Xi during the three years on the Presidential nomination committee and knew there was much left to do as a Sigma Xi member.

Three years later after a world pandemic and the challenges during that time, especially as an educator, have continued to influence me to want to represent Sigma Xi in a new role as an Associate Director. I do not know if during the last three years we have made the progress we should in regard to the importance of respect for scientifically knowledgeable people. Have we made progress in our global crisis of environmental change and is there more or less respect for women in science? I hope that my role as an Associate Director would influence the diverse group of students I teach, including my research students with whom I work side by side. I want to serve as a role model for them and illustrate that leadership opportunities exist for them even when it may take years for them to realize they can make a difference. All of the above and most likely other reasons are why I have submitted my nomination to become an Associate Director for the Northeast region.

It is important that our leaders in science, technology, engineering, and mathematics value the importance of the education of our future scientists. I believe that the **E** of **STEM** represents **E**ducation. Members of Sigma Xi, especially those in leadership positions, should have the experience and background to assist in the education of the public. It is important that there is trust in the scientific knowledge of leaders who can provide the public with the ability to make sound scientific decisions.

My research crosses over between chemistry education and pure science research having mentored over 25 undergraduates with 10 of them as co-authors on publications and all of them as presenters at conferences. Over half of the students have been females, with at least eight nationalities represented. Since my research crosses over between education and science I believe a blend of the two areas is very important and that they are not mutually exclusive. There are those of us who want to understand how students learn and process information but who also want to apply their scientific knowledge. Sigma Xi has an important role to play in support of a blend of the two areas.

Respect for diversity always plays a critical role in education whether it is with women in science, international students who need to be mentored in the nuances of the English language vs. assuming they understand us, and also students of color. I had an unpleasant experience after I took a graduate chemistry course. Yes, I was an older student in the class (about 2 times the age of the other students) but that did not make me incapable of learning. A year later after I had taken the course, I heard the professor speak at an ACS meeting. It was a scientific topic related to the course I took with him. He came out of the room, I complimented him, and he said, “you probably did not understand a thing I said”. I responded, “I understood everything you said”. His comment was inexcusable. Only because of my maturity was I able to somewhat ignore his negative comment. Do we understand that how we speak to those we are mentoring can influence them so negatively that they give up when they have potential to make a difference? They are more than worthy of our time and guidance in an environment that can feel hostile but should be one of care and concern for the individual. For those of us who believe in the mission of Sigma Xi, we have a responsibility to cultivate a robust, diverse, and inclusive community. Can we make a difference? I vote for, yes, we can make a difference.

I would love to contribute to Sigma Xi as an Associate Director. In the words of the priorities of Sigma Xi it is important to advance STEM education, promote scientific leadership and influence, cultivate a diverse, robust, and inclusive community, and demonstrate administrative excellence and fiscal responsiveness. I hope to learn more about how I can contribute to Sigma Xi in regard to these priorities.