

# Democratizing Science Communication Training Access for STEM Graduate

**Students** by *Mellisa McCartney, Ph.D* | *Tessy Ritchie* | *Idarabasi Evangel Akpan* | *Hannah Bruce Opris*

Abstract Id: **499** Submitted: **March 6, 2019** Event: **Conference for Undergraduate Research at FIU 2019**  
Topic: **Education**

**INTRODUCTION:** STEM graduate students are the future of science communication and will serve as science ambassadors. Increasingly, communicating science to the public is recognized as the responsibility of professional scientists; however, these skills are not always included in graduate training. This study provides a comprehensive analysis of what science communication training is like from the point of view of today's STEM graduate students.

**METHODS AND DATA SET:** A survey was distributed across the US in 2018. We received 143 complete responses from STEM graduate students in 24 states, two US territories, and three international locations. We have a gender ratio of 70:30 female to male and a demographic spread of 69% white, 12% Hispanic, 1% black or African American, 14% Asian, and 2% multiracial. More than half of our respondents are in the biological/health sciences (52%), 36% are in mathematics/physical sciences, 7% in the social sciences/humanities, 3% in computer sciences, and 2% in engineering. We are confident that our data represents an average graduate student.

**RESULTS:** Preliminary analysis of the quantitative data indicates that 74% of respondents stated that they received no formal training in science communication from their graduate institutions. Looking deeper into this issue, there is approximately an even spread in where the students who do receive training (26%) actually get their training: within their institution, at an extracurricular workshop, or other. This suggests that the average graduate student is most likely not receiving science communication training, and, if they are, they are most likely going outside of their institution to find opportunities. We collected data relating to specific communication skills STEM graduate students are, or are not, learning in graduate school. We also explore, using qualitative data, how today's graduate students define science communication.