

X-STEM All Access - Combining STEM Superpowers

Dr. Tracy Fanara and Tamara Robertson

April 20, 2021

TEACHER & PARENT TIPS:

Prior to the video, ask students to read the speaker biographies on our <u>website</u>. To keep students engaged during the session, we have listed some key facts to look for during the talk, listed below. In addition, ask the students to answer a list of follow-up questions for a deeper analysis of the subject matter. Some sample questions are listed on page 2 of this worksheet.

Looking for more talks? Our video library filters the videos by subject matter to make the selection process easier for your lesson plans. Access the video library here:

2020 X-STEM All Access Videos | X-STEM Symposium Videos | Festival Videos

ENGAGEMENT & FACT QUESTIONS:

<u>Dr. Tracy Fanara, Environmental Engineer and Research Scientist- read her biography before the talk here.</u>

Tracy had her first job in Florida, what did she study while working there?

What is Tracy Fanara's favorite animal?

Tracy explains that she has a favorite project that she is working on, what is that project?

<u>Tamara Robertson, Chemical and Biomolecular Engineer, and TV Host - read her biography before the talk here.</u>

What was the major that Tamara started out with in college?

For her first job, Tamara got to work on the swine flu vaccine, where did she get to live while working on it?

Why did Tamara give up her corporate job in 2015 and work for outreach companies?



REFLECTION AND ANALYSIS QUESTIONS:

Who did you learn about in this session? What is his/her name and what kind of work does he/she do?

Why is this speaker's work important?

How does his/her work have a direct impact on your life?

Tell me what you remember most from the speaker's presentation? What did you find most interesting?

What other kinds of jobs can you think of in his/her area of work?

Are you interested in learning more about this topic?

Can you predict what will change about this topic in the future? How will this impact your life?

If you could ask this speaker anything, what would it be?

Pick one fact from this talk and do your own follow up research. Provide a list of what you have learned.

BONUS Options:

When discovering her passion, Tracy had two defining moments in her career, learning about toxic waste and its consequences on the environment, and the dangers of unsanitary drinking water in first world countries. Explain what your defining moments are, and how they might relate to a future career.

Tamara explains that one of the most important things about being involved in STEM is using your skills to help others. What are some ways that you can use STEM to influence the people around you?