

## Improving Perceptions of Girls' STEM Activities – Hite and Spott

### Appendix A. Workshop Titles and Descriptions.

Workshop Title	Workshop Descriptions
The Secret Lives of Our Minds	In this workshop, participants will explore various techniques behavioral scientists use to understand human behavior. Students will be able to experience eye tracking behaviors, monitor their blood pressure after watching to hearing different things, and manipulate the ways in which their minds work. (Behavioral Science / Psychology)
Why Frogs Don't get Fat	Students will learn about the relationships between fear, predation, and feeding and how the body manages to balance growth and food intake with defense and predator avoidance. To explore further, students will explore how this balance may be related to obesity in humans. (Biology)
The Building Blocks of Life	Participants will learn about atoms, small molecules, macromolecular polymers and biomolecules. Activities will introduce students to the periodic table of elements and properties of acids, bases and polymer materials. Students will learn about the water absorbing polymers in disposable diapers and perform a polymerization reaction. (Chemistry)
Water, Water Everywhere	Where does water from the tap or bottles come from? Where does it go? To the ocean, sky, lake, or below ground? Yes! In this workshop, participants learned about the importance of water (especially in West Texas) and realize how we take it for granted. (Earth Sciences)
Keep Calm and Wind On	Wind Engineering is a quickly developing field in West Texas. The participants in this workshop will get to build hands-on models of different wind turbines, and see how they capture, store and use electricity. (Energy Engineering)
iRobot. Do you?	In this session, students will explore how robots are being used in society and the impact their daily lives. Then they will use LEGO Mindstorms EV3 robotics kits to design and build a robot to complete fun and exciting challenges. (Engineering)
Fierce, Fabulous Forensics	Student participants will focus on fingerprint identification and analysis techniques. During the workshop they will learn how skills such as math, logic, chemistry and biology are used in forensic careers through a series of hands-on experiments. (Forensic Science)
Rockin' the Rock Cycle	In this workshop, students will explore the mystery of meteorites, fossils, and minerals and learn how to melt a rock. They can melt rocks and then use them to create unique and customized jewelry pieces. (Geology)
The Science of Eating, Moving and Living Healthy	Participants will receive a "behind the scenes" look in laboratories of scientists whose roles are to learn about and promote personal healthy eating and exercise. They will get to create and test their own health and fitness experiments to learn about body composition and eating behaviors. (Kinesiology)
Future of Healthcare	Students who attend this workshop will travel to the medical school to learn basic medical techniques, examine various pathogens and get to experience a simulations lab to learn about medical procedures and parts of the body. (Medicine)
It's a Small World After All	Using non-harmful bacteria, participants in this workshop will get to look at real bacteria growing in a petri dishes and learn about how good and bad bacteria battle. (Microbiology)
How to Push the Limit in a Toxic World	Participants in this workshop will engage in hands-on activities to understand how toxicologists study the effects of pollution and chemicals on the plants and animals. They will learn the basics of toxicology and do experiments to understand threshold effects as well as extract DNA of fruit. (Environmental Toxicology)