## 2025 STEM PATHWAY SESSION DESCRIPTIONS

A Brainiac Experience - Neuroscience: Ask your neuroscience questions, ponder brain models, and investigate curious neurological cases with a neuroscientist turned teacher of science teachers turned science writer.

A World of Imagination - Mathematics: Join in for a fun, spirited challenge to build the tallest tower ever! Team up to share ideas and unleash your inner math genius in a way you've never experienced in school!

**Balanced Living - Physical Therapy:** Investigate what keeps us in balance with a neurological physical therapist and discover the multitude of career options in the field of physical therapy.

Become a Family Medicine Doctor: Become a "doctor for a day" in a fun, interactive experience assessing a patient's symptoms, diagnosing the problem, and creating a treatment plan—just like a real doctor! Understand how doctors use their knowledge, problem-solving skills, and empathy to care for people of all ages.

**Boats, Snorkels & Computers - Fish Biology:** Experience a day in the life of a fish biologist.

**Bridge Design Challenge – Structural Engineering:** Design a bridge made of straws, load it up until it falls!

**Code a Dance Party with Computer Science:** Use code to develop dance programs that respond to timed events, that respond to user input, and that create dance animations.

**College Options Roadmap: Prepare for your dream career!** Be inspired to make plans to reach your highest goals.

**Creating your own STEM Journey:** Learn how to use everyday Soft Skills to lead you to your STEM career.

**Dentistry:** Find out what it is like to be a dentist.

**Design the Future with STEM Girls – Coding:** Learn about basic electronics, wiring, and sensors on a Micro Bit with basic code.

In Land We Trust - Land Conservation: If you love being outside and exploring the natural world, join the Shasta Land Trust and learn about a career in land conservation. Discover the environmental benefits of conservation including the protection of healthy ecosystems, trails, wildlife, plants, ranches and farms and the tools used including Drones.

Lab Coats and Microscopes - Forensics: What is really like to work at a crime lab? See what it is like to process a real crime scene and examine evidence from criminal cases.

**Let's Get Physical! - Human Anatomy and Physiology:** Are you interested in the medical field? Professor Jessica Colwell shares the importance of STEM classes in preparation for a career in medicine. Explore real human bones and check out our technology - The Anatomage!

Mapping It! - Geographic Information Systems (GIS): We would be lost without maps! Learn how different careers use mapping to understand our world, support decision-making, and inform the public. Join us in a scavenger hunt, and learn how to navigate, collect, and share GIS data.

Ready or Not! - Robotics: A tool for fun and for good.

**Soar Away! - Aviation:** Check out the physics of flying through hands-on activity and the various careers that are available in Aviation including local youth programs: the Young Eagles and Civil Air Patrol.

**STEM and Medical Sales Consulting - How You Can Save Lives:** Discover the fascinating field of health care where STEM students can use their knowledge to enhance the well-being of others without extensive years of medical training.

**The Body Within - Medical Imaging:** Be a technician who helps doctors diagnose conditions by taking pictures of the inside of the human body.

**The Unseen Universe - Pathology & Histology:** Pathologists are essential for patients in the world of medicine. Examine a slide of your own cell under a microscope.

Why be a Nurse Practitioner or a Physician Assistant: Discover the qualities of a great NP and PA and the benefits of these careers. Are you compassionate, a problem solver, enjoy being part of a team, like flexibility and spontaneity? Explore these growing medical fields.

**Wildland Fire!** Learn what it takes to become a wildland firefighter/first responder in a dynamic and challenging environment.

**Wildlife, Restoration and Outdoor Education - Ecology:** Learn about ecology and wildlife habitat restoration, as well as science-based outdoor education careers through hands-on activities.