

# Stanislaus State Science in Our Community

### **Overview & Impact**

The **Science in Our Community** outreach program is dedicated to science education and public engagement. This program, supported by volunteer efforts of Stan State students, faculty, and staff provides STEM activities to educationally and economically disadvantaged students in the University's service area.

1,930 Total Volunteers
20,396.75 Total Volunteer Hours
\$638,778.96 Total Volunteer Financial Impact
18,248 Total Participants
236 Total K-12 Schools

#### Astronomy Night



Astronomy Night gives all members of the community an opportunity to view the heavenly bodies that are out in the evening through telescopes and ask questions of an astronomical nature. There are also activities for young astronomers such as making your own planet by coloring styrofoam balls, diffraction gradient viewing, and videos of current images taken by the Webb and Hubble space telescopes.

#### **Junior Scientist**

The **Junior Scientist Program** provides 4th grade students with STEM curriculum enrichment for the local schools from the Turlock Unified School District. Students accompanied by teachers and parents visit Stan State to participate in 3-hour-long science lessons free of cost. These science activities reinforce the in-class curriculum and provide a hands-on approach to localized issues and problems. The program aligns with the Next Generation Science Standards (NGSS).

## Example Topics & Activities

- Make a Marker Man Float
- Molecules and How They Work: Polarity and Different Types of Bonding
- Fast or Slow...Chemistry Makes it Go!
- Build a Wind-Powered Car
- How to Make Rock Candy
- Building Proteins
- Ozobots

- Solar 101
- Basic Electricity for Solar
- Design Your Own Solar System
- Bug to Dye For!
- Celebrate Earth Month
- Chemistry Goes Pop!
- Introduction to Artificial Intelligence
- Nursing Simulation Lab

### Science Day



Science Day features over 40 science activities in an open-house environment in Stan State's Naraghi Hall of Science, Science 1 Building, Greenhouse, and Sustainable Garden. Students and their families

receive a "Passport to Science" booklet to track their activities throughout the day. When in-person activities were limited by the pandemic, Science Day was a week-long virtual event in which PreK-12 classrooms can participate in 30-60 minute STEM activities such as demonstrations, experiments, or learning and applying concepts in a hands-on activity.

#### Solar Suitcase

Undertaken in partnership with the We Share Solar Program, the **Solar Suitcase Program** helps middle school students develop their solar systems and enhances the learning of green energy sources. A solar suitcase is a portable and packable solar panel, which when folded resembles the shape of a suitcase. These robust, easy-to-use solar electric systems provides highly efficient lighting and power for mobile communication and small devices. Once assembled, the student-built systems are sent to areas lacking electrical utilities, generally schools and refugee camps. Also, middle school students learn the global aspect of energy access and the social issues accompanying this subject. A group of student volunteers lead this activity by going onto the school site to work with the students on this project.



- Pressing Plant Specimens
- Volcano-Making Chemical Reactions
- How Drones Fly
- PTC: Taste Test
- Sustainable Garden Tour
- Krypto! Card Game
- Paper Bridge Construction
- Robot Programming with Cozmo