



# North Bay SCIENCE DISCOVERY DAY

Sunday, May 15, 2022 | 10:00 a.m. to 4:00 p.m. | Sonoma County Fairgrounds  
A science festival to spark children's wonder and curiosity for science, technology, engineering, and mathematics!

## Welcome

The sponsors, exhibitors, and volunteers welcome you to the North Bay Science Discovery Day. The goals are to spark young people's wonder and curiosity for science, technology, engineering, and mathematics (STEM). We support collaboration to strengthen the North Bay's STEM learning ecosystem to expand and sustain youth STEM engagement. We support cultivating interest in STEM careers, building a global competitive workforce, and increasing the economic vitality of the North Bay. Thank you for being here.

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## What's Next?

Visit our website for ideas to continue science, technology, engineering, and mathematics learning!  
[northbayscience.org](http://northbayscience.org)



See you next year!  
March 11, 2023



## Hosting Sponsors



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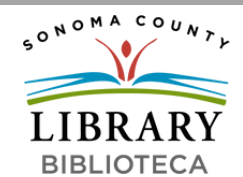
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## Silver Sponsors

Donald and Virginia Pierce  
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## Media Partners



## Planning Team

The volunteer planning team live, work, and play in North Bay communities. Thank you to: B. Gabriela Arango, Dennis Bentley, Lyman Black, Steve Kadar, Stuart Levin, Susan Magnone, Don Pierce, Mike Roa, Lori Lee, Leonard Weingarten, Kerry Winger, and Steven Worker.

Please consider joining the volunteer planning team!  
Email to inquire at [info@northbayscience.org](mailto:info@northbayscience.org)

# OUTDOORS

Exhibitor	Inquiry Question
Boy Scouts of America, Redwood Empire Council	<i>How do Scouts have fun while using STEM?</i>
California Highway Patrol	<i>What technologies do officers use?</i>
Children's Museum of Sonoma County	<i>Can you make a rocket that will launch into the air?</i>
Department of Forestry and Fire Protection	<i>How are the fire sciences used to protect us?</i>
Marin County Free Library	<i>Can you match the animals with their tracks?</i>
Pacific Coast Air Museum	<i>What makes aircraft fly?</i>
Penguin Empire Robotics - San Marin High School	<i>What can robots do for you?</i>
Robert Ferguson Observatory	<i>What makes our favorite star shine? Why is it important to our planet?</i>
Sonoma County Library - BiblioBus	<i>How do the magnets move objects without touching?</i>
Sonoma County Public Health	<i>Free COVID-19 vaccination clinic.</i>
SRJC Computer Studies	<i>What happens when Mentos are added to diet cola? Why does it happen?</i>
SRJC Drone Studies Program	<i>What does a drone look like and what can it do?</i>
STEMinism	<i>What happens when dry erase art is put in water?</i>
The Bird Rescue Center	<i>Why are birds important to the environment?</i>
The Buck Institute for Research on Aging	<i>What is the ecological role of sharks?</i>
Viavi Solutions - Optical Security and Performance	<i>How is light used in our daily lives to make products safer?</i>
WGAS Motorsports	<i>How high-tech are championship monster trucks?</i>
WildCare	<i>What does an owl pellet reveal about an owl's role in an ecosystem?</i>



# INDOORS - GRACE PAVILION

Exhibitor	Inquiry Question
<b>First Aid / Primeros Auxilios - Information Help Booth (South)</b>	
501st Legion Golden Gate Garrison	<i>How can I become a member of the 501st Legion?</i>
A Traveling Space Exhibit	<i>What does it take to fly into space? What is a meteorite?</i>
Advanced Personalized Learning	<i>How can I build my own Nerf robot?</i>
Boy Scouts of America, Redwood Empire Council	<i>What adventures in science will interest you as part of peer-led Scouting groups?</i>
Charles M. Schulz Museum	<i>How do you use science to bring still objects to life?</i>
Creceer ConCiencia	<i>Why are pollinators so important? Do we have food without pollinators?</i>
Denali Therapeutics	<i>What does a brain look like and how does it function?</i>
Internet of Things Mob	<i>What happens when you combine 3D Printing, IoT, and AI?</i>
Kaiser Permanente	<i>What can we do to help prevent the continuation of this pandemic?</i>
Keysight Technologies, Inc. - Engineers	<i>What's it like to be an engineer?</i>
Keysight Technologies, Inc. - Pendulum	<i>The Pendulum: How can a simple pendulum teach us about electrical waves?</i>
Keysight Technologies, Inc. - Music and Math	<i>Music and Math: What does sound look like?</i>
Keysight Technologies, Inc. - Electromagnetic Waves	<i>Invisible Electromagnetic Waves: How do cell phones and remote controls work?</i>
Keysight Technologies, Inc. - Fault Measurement	<i>Distance To Fault Measurement: If there's a broken wire, how can we tell where that broken wire is?</i>
Keysight Technologies, Inc. - Microscope and Microcircuits	<i>Microscope and Microcircuits: What is really inside of a microchip or microcircuit?</i>
Maria Carrillo High School Robotics Club	<i>How will robots be involved in your future?</i>
Medtronic - Artificial Intelligence	<i>How will AI change medicine, surgeries and health?</i>
Medtronic - Heart Anatomy	<i>Where is your heart in your body? What does your heart do and why is it there?</i>
Medtronic - Idea Wall	<i>If you could invent anything what would it be?</i>
Medtronic - Laparoscopy Both	<i>What is laparoscopic surgery? Why is it developed?</i>
Medtronic - Vascular Catheter Lab	<i>Would you like to know what it's like to be a doctor and perform surgery on a patient?</i>
Milo Baker Chapter - California Native Plant Society	<i>How do native plants adapt to drought in our region?</i>
Mobile Climate Science Labs	<i>How are young people making practical discoveries as leaders in climate action?</i>
National Science Teachers' Association	<i>How is science taught?</i>
NorCal Bats	<i>Why do people need bats in our home towns?</i>
Petaluma Wildlife Museum	<i>What is biodiversity and why is it important?</i>
Rebel Legion Endor Base	<i>How can you support science and join the Rebel Legion?</i>
Recology Sonoma Marin - Waste Zero	<i>Where does your household waste go?</i>
ROV TOUR: Underwater Robotic Adventures	<i>What can you do with an underwater remotely controlled robot vehicle?</i>
Smile Orthodontics	<i>How does technology help orthodontists predict the outcomes of treatment?</i>
Sonoma County Ag + Open Space	<i>What does land conservation mean to you?</i>
Sonoma County Radio Amateurs	<i>How do radio waves work?</i>
Pacific Coast Air Museum	<i>What makes aircraft fly?</i>
Sonoma State University Center for Environmental Inquiry & Bio Outreach	<i>What is a watershed &amp; what lives there?</i>
Sonoma Water	<i>What lives in our rivers and creeks?</i>
SRJC Chemistry Club	<i>Why does color sometimes change in a chemical reaction?</i>
SRJC Physics Club	<i>What is electricity, density, and momentum?</i>
The Buck Institute for Research on Aging	<i>What can you see under a microscope?</i>
U.S. Geological Survey (USGS) - Earthquake Science Center	<i>Why do earthquakes happen in the San Francisco Bay Area?</i>
UC 4-H Youth Development Program - STEM Education	<i>What can you add to your community to make it a happier place?</i>
UC Berkeley Lawrence Hall of Science	<i>What will you discover making art through motion?</i>
UC Berkeley RadWatch & DoseNet	<i>Where do we find nuclear radiation in our environment and how do we measure it?</i>
UC Cooperative Extension, Sonoma County	<i>How do we get butter from milk?</i>
UC Davis Integrative Genetics and Genomics	<i>What is DNA and how do scientists study it?</i>
UC Davis Science Says	<i>How do you make polymers?</i>
Ultragenyx Pharmaceutical - Pharmacology/Toxicology	<i>What can you observe about magnets?</i>
Veolia Water	<i>How do microorganisms help us treat wastewater?</i>

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