



Bay Area
SCIENCE
FESTIVAL

PROGRAM GUIDE
2022

Organized By

UCSF

Presented By



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Enjoy **reduced admission** to the **Tech Interactive, Exploratorium** and **Academy of Sciences** during the Bay Area Science Festival April 21-30, 2022! Please visit the Festival website for full details on how to redeem each museum discount. Each location has a slightly different offer, method for redeeming, and limitations.

Event times and dates are subject to change. For the most current schedule and COVID event requirements visit www.bayareasciencefestival.org/events

Welcome to the Bay Area Science Festival!

We are thrilled to once again be gathering in-person for this community celebration of science! Led by UCSF's Science & Health Education Partnership (SEP), the Festival brings together our region's leading educational, cultural, and scientific institutions to share our passions for science, technology, engineering and math with the Bay Area community.

We invite you to jump in and explore with hands-on activities, behind-the-scenes tours, virtual events and more. Whether you are a science devotee or just beginning to connect to the field, we promise that you'll find something in the Festival that sparks your interest! Engage with local scientists and engineers and learn something new, question, and wonder.

Our heartfelt thanks to the inspiring scientists and engineers, passionate volunteers, committed collaborators and generous sponsors who have made this Festival possible.

Let's discover science together!



Bay Area
SCIENCE
FESTIVAL



it's only human to recognize education is the smartest investment

Today's students go on to become tomorrow's employees — including ours. At Chevron, we support science, technology, engineering, and math education to help students develop real-world problem-solving and critical-thinking skills. We're preparing students for the opportunities ahead. It's good for the future of our community. And our company. Learn more at chevron.com

**Chevron is proud to have supported the Bay Area
Science Festival since its inception in 2011**



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Discovery Days



Oracle Park

Sunday, 4/24

11AM - 4:00PM

Oracle Park

San Francisco

Cost: FREE

Event is held rain or shine!!

Join us at **Discovery Day at Oracle Park** to experience hundreds of dynamic demonstrations, engaging experiments, and geeky games led by Bay Area scientists and engineers.

Highlights:

Unlock the mysteries of science with **UCSF**! Learn how our bodies work: how cells divide, how we hear, how neurons communicate with each other and more.

Visit the **Chevron STEM Zone** to test your athletic reflexes, design more efficient wind turbines, and build and test a rocket!

Explore biotechnology activities with leading Bay Area companies in **Life Science Alley**!

Interact and play with robots that have been built by industry groups, academia and school clubs in the **Robot Zoo**!

Discovery Days

East Bay

Saturday, 4/30

11AM - 4PM

Cal State East Bay –

Hayward Campus

Science Buildings

25800 Carlos Bee Blvd

Hayward

Cost: FREE



Come enjoy a showcase of science, technology, and engineering-led by businesses, museums, and universities from the East Bay and beyond!

With hands-on, interactive science booths and live science demos, you can explore STEM fields, engage your passions and discover new ones.

Some **Highlights:**

- The Shake Station
- Explore the Brain
- Paper Microscopes
- Solving Art Mysteries with Chemistry
- Health Screenings and
- Robots galore
- Our Amphibian Teachers
- Raptor Rehabilitation



Explorer Tours

Explorer Tours highlight the incredible science resources in the Bay Area through tours, hikes and active explorations.

Come out for a unique, fun and educational glimpse into the scientific wonders of the Bay Area!

Explore virtually:

- A Robotics Genome Editing Lab
- SLAC National Accelerator Laboratory

Tour in-Person:

- A Deep Ocean Exploration and Research Lab
- The Presidio Archaeology Lab

Get close with Nature:


- Take an Earth Day Baylands Tour
- Enjoy a Creekside Story Walk by the Oakland Zoo

And many many more!
Various times, locations & formats



Thermo Fisher Scientific is proud to support UCSF and the Bay Area Science Festival

Our Mission is to enable our customers to make the world healthier, cleaner and safer. We are committed to inspiring the next generation of innovators. To learn more about our STEM education initiatives and how we give back to our communities visit thermofisher.com/csr

 For career opportunities visit jobs.thermofisher.com



Science Museum Discounts

Thank you to our local Science Museums for sharing exclusive discounts with our Bay Area Science Festival participants from April 21-30, 2022! Please visit the Festival website for full details on how to redeem your museum discount. Each location has a slightly different offer, method for redeeming, and limitations.

\$10 OFF



**The Tech
Interactive**

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CALIFORNIA
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Being a Radiologist – Learn to Read X-rays!

Have you ever wondered what it's like to have x-ray vision? A Radiologist gets to use this superpower every day. By using a special camera they are able to take a picture of your insides to look at your bones, organs, and muscles. Join us for a conversation with some of UCSF's Radiology and Biomedical Imaging Team. We will touch on a number of topics and invite participants to ask questions about our work.

Registration required.



4/21, 4 - 4:30pm

Virtual Event

Visit BASF website for link

Cost: FREE

What is a Radiologist?

What are Radiology and Imaging? What does a Radiologist do? How do you become a Radiologist? What specific equipment is used in Radiology and Biomedical Imaging? What do Radiologists look for in images? What are the many roles of a Radiologist? Join the conversation with some of UCSF's Radiology and Biomedical Imaging Team. We will answer these questions and your questions so you'll have a better understanding of Radiology and Radiologists.

Registration required.



4/21, 4:30 - 5pm

Virtual Event

Visit BASF website for link

Cost: FREE

Rockin' Around Stanford

EXPLORER TOUR

Take a geological walking tour of Stanford's campus! Meet geologists at Stanford and learn about some of the tools they use to investigate rocks. On our walk we'll explore the rocks that make up several buildings and sculptures on Stanford's campus. We'll learn about where the rocks came from and how they got to Stanford. We'll practice making geological observations and use them to think about how the rocks formed. All ages are welcome!



4/21, 4:30 - 6:30pm

Stanford University

Braun Corner

450 Jane Stanford Way

Stanford

Cost: FREE

Friday, April 22

STEM Storytime: Teen Inventors

Can teen science make a difference? Yes, it can! In this virtual event former Middle School teacher and author Fred Estes recounts stories of real teen inventors and discoverers. These are stories of creativity, discovery, persistence, and determination to make a difference. Where did these teens' ideas come from? How did they go about their inventing and discovering? How did they overcome their roadblocks and problems? Come to listen and ask questions during this half hour virtual event.



4/22, 10:30 - 11am

Virtual Event

Visit BASF website for link

Cost: FREE

SLAC National Accelerator Laboratory

VIRTUAL EXPLORER TOUR

As part of SLAC's 60th anniversary, we will be offering two engaging hour-long virtual tours that will cover SLAC's history, our facilities and sciences that address discoveries and solutions for tomorrow's challenges. During the tour, attendees will have the opportunity to interact with tour guides in real time and win exciting prizes from trivia games. Open to all ages (suggested minimum age of 7 years).

Registration required.



4/22, 12 - 1pm & 3 - 4pm

Virtual Event

Visit BASF website for link

Cost: FREE

Explore Physics at UC Berkeley

Find out what it's like to study physics at UC Berkeley, what the world of research looks like, what the most interesting breakthroughs in physics have been, and get a personal overview of the community at UC Berkeley. Physics students will explain some interesting concepts, from quarks and subatomic particles to the universe and the Big Bang, and will answer questions for the audience. Be ready to meet professors, researchers, student organizations, and visit modern labs. Get inspired to become a scientist!

Registration required. Minimum age 12 years old.



4/22, 1 - 4pm

UC Berkeley Physics Building

366 Physics North

Berkeley

Cost: FREE

How Synthetic Biology Helps Biodiversity Conservation

EXPLORER TOUR

Many molecules and dyes are extracted from plants often destroying the plant upon extraction, leaving nothing to put back into its original habitat. Twist Bioscience, a leader in the synthetic biology industry, is helping to alleviate some of the burden by synthetically generating DNA used to make these molecules and dyes. In this guided tour, we take a walk in the San Bruno Mountain Park to explore many native and non-native plants, and see plants that are often destroyed for their dyes and molecules.

Registration required.



4/23, 8:30am - 12pm

San Bruno Mountain State Park
555 Guadalupe Canyon Pkwy
Brisbane
Cost: FREE

Earth Day Climate Action

Join California State Parks Foundation and the Candlestick Point State Recreation Area for an Earth Day Restoration Work Day that will focus on invasive plant removal to help our urban state park become more climate resilient in the face of the ever-present threats of climate change.

Registration required.



4/23, 9am - 2pm

Candlestick Point State
Recreation Area
500 Hunters Point Expressway
San Francisco
Cost: FREE

Science of Bubbles

Discover the Science of Bubbles at Quest Science Center's Science@Stockmen's Park series. Experience a dozen hands-on soap bubble activities, along with performances and competitions. Learn about the science behind surface tension, soap solutions, and special ingredients to make gigantic and colorful bubbles. Explorers of all ages are welcome at this community drop-in event. Visit quest-science.org for more information and optional registration.



4/23, 10am - 1pm

Stockmen's Park
25 S Livermore Ave
Livermore
Cost: FREE

Saturday, April 23

The Natural Wonders of Glen Canyon Park

EXPLORER TOUR

Join the California Native Plant Society Yerba Buena to explore parts of the 70-acre Glen Canyon Park. Glen Canyon contains a variety of wildlife habitats and vegetation including native grasslands, riparian areas, forbs, shrubs, and trees. We will observe the spring phase of local plants and wildlife whose habitat is created by these native plant communities. Layers of clothing and water are recommended.

Space limited. Registration required.



4/23, 10am- 2pm

Glen Canyon Park
Corner of Elk Street at Chenery
Street
San Francisco
Cost: FREE

STEM Storytime: Teen Inventors

Can teen science make a difference? Yes, it can! In this virtual event former Middle School teacher and author Fred Estes recounts stories of real teen inventors and discoverers. These are stories of creativity, discovery, persistence, and determination to make a difference. Where did these teens' ideas come from? How did they go about their inventing and discovering? How did they overcome their roadblocks and problems? Come to listen and ask questions during this half hour virtual event.



4/23, 10:30 - 11am

Virtual Event
Visit BASF website for link
Cost: FREE

Presidio Archaeology

EXPLORER TOUR

Explore the rich history of the Presidio of San Francisco as it is discovered every day through archaeology. Head to the active dig site to meet Presidio archaeologists, see the remnants of the Spanish Fort and learn about the archaeological process. Archaeologist will talk about their methods and the state-of-the-art lab and collections facility where artifacts are studied to reveal the hidden stories of the indigenous Ohlone, Spanish, Mexican, and American families who have called the Presidio home.

Registration required.



4/23, 10:30 - 11:15am

Presidio of San Francisco
Pershing Square
50 Moraga Ave
San Francisco
Cost: FREE

Saturday, April 23

Forests in Focus

Watch science unfold through the lens of filmmaking in California woodlands. Join the Science Communication Lab's team for a screening and discussion of their award-winning short film "A Walk in the Woods." Learn what it was like filming a redwood forest after a large wildfire and how film can offer a new window into the natural world. This film will also be available to watch at the Microcinema throughout the day.

Please visit the Festival website for full details on how to redeem a \$5 discount for admission to the Exploratorium.



4/23, 11am - 12pm

Exploratorium

Pier 15

San Francisco

Cost: Admission to the museum
(\$5 BASF discount available)

Defeating Neurodegeneration

Virtual Career Panel and Tour

Join our diverse panel of Denali Scientists, as they discuss their journey from student to industry professional. Learn about how they chose their career paths and what majors, interests, and/or life factors influenced their way to a career in drug discovery/development for brain diseases. Experience a virtual lab tour of Denali Therapeutics, taking a sneak peek into Denali's technology and culture.

Registration required.



4/23, 12 - 1:30pm

Virtual Event

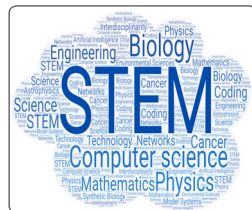
Visit BASF website for link

Cost: FREE

STEM Careers & Society

This online event, organized by the American Association of University Women, will highlight the interdisciplinarity of STEM careers and how science and society are profoundly interconnected in our world today. We invite you to join a panel that will explore topics from tech entrepreneurship to intellectual property, from science outreach to public policy, and how a STEM background can be applied to multiple professional fields. We will hear from four women in different STEM careers and weave the audience questions into a broader conversation about science and society.

Registration required.



4/23, 12:30 - 1:45pm

Virtual Event

Visit BASF website for link

Cost: FREE

Saturday, April 23

Introduction to PyGame

Learn from TeenTechSF and get a fun intro to video game design with PyGame! In this beginner friendly workshop, we will learn about the basics of programming and coding in Python, variables, conditionals, loops, and more. You will use trinket.io, python, and PyGame in order to create a cool snow animation. Don't just be a video game player, get started learning how to be a video game designer!



4/23, 1 - 2pm

Virtual Event

Visit BASF website for link

Cost: FREE

San Francisco Math Circle Math Festival

At the San Francisco Math Circle, we make math accessible, inclusive, and fun! The SF Math Circle is an extracurricular math enrichment program that encourages students to develop their identities as mathematical thinkers in a supportive, collaborative, and fun environment. At the SFMC Math Festival, we will provide a bunch of our favorite math enrichment activities for students to explore: engaging, hands-on puzzles and games that involve both creativity and critical thinking.

Registration required.



4/23, 1 - 3pm

San Francisco State University

1600 Holloway Avenue

San Francisco

Cost: \$5/ticket

Protecting and Rehabilitating Local Raptors

Join the Wildlife Center of Silicon Valley (WSCV) for an educational talk about local raptor species, issues that affect our local birds of prey, simple ways to help raptors in your neighborhood, and what WSCV does to rehabilitate sick, injured, and orphaned wildlife in the Bay Area. Bring your questions about raptors, and local wildlife in general!



4/23, 2 - 3pm

Virtual Event

Visit BASF website for link

Cost: FREE

Introduction to Rocketry

Come meet UC Berkeley's Space Technologies and Rocketry (STAR) team. Learn about the fundamentals of rocketry and engineering as you take a journey to space! By the end of our presentation, you'll be ready to build your own model rocket. Together, we'll build straw rockets, fly them outside, and see if you can describe how your straw rocket works with a mini rocket-science quiz. No prior experience necessary, all ages are welcome.

Registration required.



4/24, 10am - 12pm

UC Berkeley
88 Dwinelle Hall
Berkeley
Cost: FREE

Discovery Day at Oracle Park

This free family event is unlike any other – with dynamic demonstrations, engaging experiments, geeky games and astounding activities for all ages! This super-charged, super-fun celebration will include hundreds of hands-on activities, robots and opportunities to meet local scientists and engineers on every level of the ballpark.



4/24, 11am - 4pm

Oracle Park
24 Willie Mays Plaza
San Francisco
Cost: FREE

Nature Expo at Daniels Nature Center

Share hands-on science and nature's wonders with docent and staff naturalists at Midpen's Daniels Nature Center located on the shores of Alpine Pond in Skyline Ridge Preserve. Learn about local flora and fauna, meet the resident gopher snake, Rolo, and celebrate Earth Day too! During your visit you can also explore the preserve's trails on a short guided hike with docents, or by taking one of two self-guided interpretive nature walks.

Park in the Russian Ridge Open Space Preserve parking lot and walk through the pedestrian tunnel to the Nature Center.



4/24, 1 - 5pm

Daniels Nature Center
Skyline Ridge Open Space
Preserve
La Honda, CA
Cost: FREE

Monday, April 25

Building Climate Resilience in the Bay Area

Join us for a behind the scenes tour of the Save the Bay plant nurseries and tour the shoreline to see these native plants in action providing habitat, filtering water, and protecting our shorelines from sea level rise. Attendees will leave with an understanding and appreciation for the ecosystem services that humans and wildlife receive from tidal marsh wetlands and the restoration work that Save The Bay is doing to restore this vital habitat.



4/25, 10 - 11am

Virtual Event

Visit BASF website for link

Cost: FREE

Oh Behave!

Changing our Reaction to Bias and Discrimination

Dive into the research to demystify why prejudice and bias have persisted for so long. Understand the impacts of our "representational landscapes", such as why folks like Native Americans and queer people get left out of our national narratives or how racial segregation maintains bias, and what actions we can take against it. Use science-tested practical techniques to fight discrimination when it comes up and when you see it happen in real life.



4/25, 5 - 6pm

Virtual Event

Visit BASF website for link

Cost: FREE

Registration recommended.

Changing Shorelines and the Future of San Francisco

EXPLORER TOUR

Join a California State Parks Interpreter as we take a walk through the history of south San Francisco's shoreline and explore how our shorelines have shifted due to both natural phenomenon and human activity. Trace the path of past shorelines, and get a glimpse into the future of our shorelines as we discuss how climate change and sea level rise will impact San Francisco, and what we can do to protect our shorelines for ourselves and future generations.

Registration required.



4/25, 6- 7pm

Candlestick Point State

Recreation Area

500 Hunters Point Expressway

San Francisco

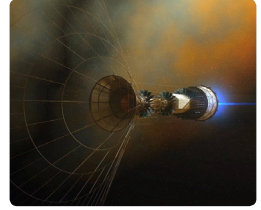
Cost: FREE

Monday, April 25

WONDERFEST: Starship Reality-check

The Science of Deep Space Travel

The stars beckon. But humans evolved to survive on Earth, not to hurtle through space. For long-duration travel what spacecraft accommodations are necessary? Is on-board human hibernation an option? Might we overcome the problems of space radiation and prolonged weightlessness? Join our two speakers Dr. Pascal Lee, Planetary Scientist at the SETI Institute and the Mars Institute, and Tucker Hiatt, Director of Wonderfest.



4/25, 7 - 8:30pm

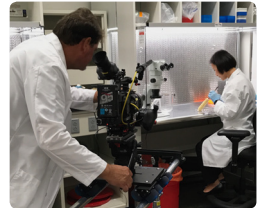
HopMonk Tavern
224 Vintage Way
Novato
Cost: FREE

Tuesday, April 26

Before the Curtain Rises

How do you Make a Film about Science?

Long before a film hits the big screen, it begins as a nebulous idea, to be formed, challenged, and morphed into a multimedia experience. Films about science carry an extra challenge -- telling stories about complicated topics and elements invisible to the human eye. Science Communication Lab has tackled these questions by becoming a leading innovator in science filmmaking. Come hear the stories behind the filmmaking and engage in a lively discussion around the power (and pitfalls) of bringing the stories of science to film.



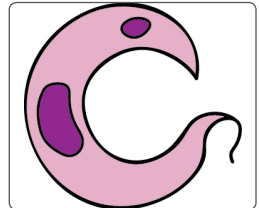
4/26, 12 - 1:00pm

Virtual Event
Visit BASF website for link
Cost: FREE

What's Infecting Us?

Laboratory Detection of Pathogens in the Current Era

Nearly all infectious diseases need laboratory testing for diagnosis and treatment. In this session we will present an overview of clinical microbiology techniques, from traditional microscopy to the latest molecular diagnostics. Then explore a UCSF infectious diseases research laboratory to see how research on *Trypanosoma cruzi*, the etiologic agent of Chagas disease, is being used to develop novel diagnostic assays.



4/26, 3 - 4pm

Virtual Event
Visit BASF website for link
Cost: FREE

Tuesday, April 26

3D Printing & Silicone Casting Demonstration

VIRTUAL EXPLORER TOUR

Join the UCSF Library's Makers Lab for a live, virtual demonstration. Learn how 3D printing and silicone casting are being used to create models for UCSF faculty, students, and researchers. The demonstration will be like a cooking show - but for health sciences projects! View the technology in action, learn about projects from UCSF, and ask Makers Lab staff questions.



4/26, 4 - 4:30pm

Virtual Event
Visit BASF website for link
Cost: FREE

How to Bioblitz

Interested in attending a bioblitz but not sure how to start? Intimidated by all of the different tech options for identifying the plants and animals around you? Join CA State Park Interpreter Charli who will answer all your citizen science, bioblitz, and nature technology questions and get you prepared for the upcoming City in Nature Challenge happening April 29 - May 1!

Registration required.



4/26, 4 - 5pm

Virtual Event
Visit BASF website for link
Cost: FREE

Nanotechnology and Engineering for Medicine

VIRTUAL EXPLORER TOUR

Join us for a virtual tour of a UCSF Bioengineering and Therapeutic Sciences lab where researchers use nanoscale technologies to create new and improved ways to deliver medicine to sites in the body and to enable the body to heal itself. Scientists will share about their research and take attendees on a virtual tour of the laboratory, highlighting some of the equipment and experiments used in their research. The presentation and tour will be followed by a Q&A session.



4/26, 5:30 - 6:30pm

Virtual Event
Visit BASF website for link
Cost: FREE

Tuesday, April 26

Robotics Genome Editing Lab

VIRTUAL EXPLORER TOUR

The Laboratory for Genomics Research at UCSF works on building and scaling up CRISPR-based genome editing tools and cell engineering approaches. Join this virtual tour and see a fully automated high-throughput cell culture system with self-contained robotic arms to access the incubator, microscope, liquid handler, and other equipment.



4/26, 5:30 - 6:30pm

Virtual Event

Visit BASF website for link

Cost: FREE

Protegiendo y Rehabilitando Aves de Rapiña Locales

Wildlife Center of Silicon Valley le invitamos a un curso educativa en espanol donde estariamos hablando sobre aves de rapina locales tal como el halcon, aguilas y buhos. Hablaremos de como ellos pueden ayudar al medio ambiente y como rehabilitamos animales salvajes que se encuentran enfermos, lastimados o huérfanos en area de bahia. Nos pueden hacer preguntas hacerca de aves de rapina o de otras animales salvajes en general.



10/26, 6 - 7pm

Virtual Event

Visit BASF website for link

Cost: FREE

Join the Wildlife Center of Silicon Valley (WSCV) for an educational talk in Spanish about local raptor species.

Wednesday, April 27

Virtual Tour of Recology San Francisco

VIRTUAL EXPLORER TOUR

Join us for an overview of Recology. During this webinar, you will learn about the history of Recology, the innovative programs we have put in place with the City of San Francisco, how Recology is improving the sorting process for recycling while maintaining a focus on reducing and reusing, and what individual actions you can take to create an impactful change by making choices that protect and preserve our fragile planet.



4/27, 12:30 - 1:30pm

Virtual Event

Visit BASF website for link

Cost: FREE

Registration required.

Wednesday, April 27

Water Rocket Rally

Blast into physics at the Hiller Aviation Museum Water Rocket Rally! Learn about Newton's Third Law and examine a real rocket built by the Jet Propulsion Laboratory. Then design, construct and launch a water rocket made from a recycled soda bottle! After the rocket launch, participants may explore the Hiller Aviation Museum's collection of some fifty different air and spacecraft. Bring a clean, recycled 1- or 2-liter soda bottle (no water bottles) to launch your rocket. Recommended for Grades K-5.

Registration recommended.



4/27, 1:30 - 4:30pm

Hiller Aviation Museum
601 Skyway Rd
San Carlos
Cost: FREE

Augmented Reality California Trail Scavenger Hunt

EXPLORER TOUR

Try out Oakland Zoo's newest offering - an interactive augmented reality scavenger hunt. Using an app, access your "Mission" and its "Challenges". These challenges will provide themed, self-guided learning opportunities relevant to the Zoo and our conservation efforts. A smart phone or tablet is required to participate in this event. Participants can arrive anytime between 2:00pm and 4:00pm.

Registration required.



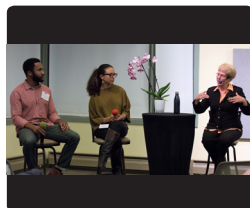
4/27, 2 - 4pm

Oakland Zoo (California Trail)
9777 Golf Links Rd
Oakland
Cost: FREE

Ask the Scientist

How do scientists go from OMG to advanced degree? How do they turn their passion for science into their profession? What advice do they have for future scientists? 5th-12th grade students, parents and teachers are invited to join the Estuary & Ocean Science Center for a lively conversation with an environmental scientist about their love for science.

Registration and parental permission required.



4/27, 2:30 - 3:15pm

Virtual Event
Visit BASF website for link
Cost: FREE

Biomimicry: Nature's Design

Through an interactive presentation by The Energy Coalition, learn about "Biomimicry: Nature's Design." Participants will apply engineering design skills through a creative project that identifies traits in their native flora and fauna and uses them as inspiration to design a new technology or enhance existing human technology. Collaborate and design a solution to a problem using biomimicry and determine the benefit your invention will bring to solve a real-world climate or energy problem.

Registration required.



4/27, 4 - 5pm

Virtual Event

Visit BASF website for link

Cost: FREE

Exploring the Science of Gardening

Join a California State Parks interpreter at the Candlestick Point State Recreation Area Community Garden and 'dig in' to the science behind gardening and the garden food web. Explore what makes gardens an amazing place to see different plants and animals in this hands-on family science workshop. Pick up a magnifying glass and get your hands dirty as we discover all of the amazing ways that we can find science in our local garden. All families will leave with a brand-new seedling to continue the learning at home!

Registration required.



4/27, 4 - 5:30pm

Candlestick Point Community Garden

1150 Carroll Ave

San Francisco

Cost: FREE

Liquid Sunlight and Artificial Photosynthesis

The Future of Solar Materials

Learn about the promise and challenges of creating liquid fuels from sunlight and carbon dioxide. Scientists at Berkeley Lab's Liquid Sunlight Alliance (LiSA) are working to overcome the technological and scientific challenges that stand in the way of fully realizing these eco-friendly sources of the fuels and materials that still underpin our economies.

Registration required. Suggested minimum age: 12 years old.



4/27, 7 - 8pm

Virtual Event

Visit BASF website for link

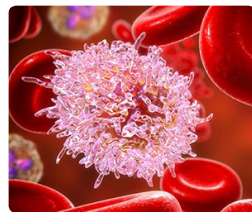
Cost: FREE

Wednesday, April 27

Your Immune System in Health and Disease

The human immune system fights off infections by viruses, microbes, and parasites, and is increasingly recognized for additional roles in causing, exacerbating, or preventing a wide variety of diseases, ranging from inflammatory bowel disease, allergy, asthma, and atherosclerosis to cancer. Join UCSF's Osher Mini Medical School for the Public for an overview of how the immune system works and how diseases are being treated by a range of new therapeutics that work by enhancing or inhibiting elements of this system.

Registration required.



4/27, 7 - 8:30pm

Virtual Event

Visit BASF website for link

Cost: FREE

Thursday, April 28

Día de la Ciencia: Un Vistazo al Laboratorio

Este evento se llevará a cabo de manera virtual y contará con la participación de 5 científicos de la UC Berkeley. Dicho evento consistirá en tours, previamente grabados, del laboratorio o campo laboral de cada uno de los científicos, y será seguido de una mesa redonda sobre la vida cotidiana de los científicos participantes y su trayectoria profesional en el campo de la ciencia. ¡El público tendrá la oportunidad de conocer a científicos de la química, la biología, la física, la ciencia ambiental, y mucho más! Como organizadores de dicho evento, esperamos que no solo se desmitifique las carreras científicas, sino que también inspire a la juventud y las nuevas generaciones a emprender una carrera en el campo de las ciencias. Importante: este evento se realizará completamente en español, con el fin de alcanzar un impacto entre la comunidad hispanohablante.



4/28, 11am - 12:30pm

Virtual Event

Visit BASF website for link

Cost: FREE

Creekside Story Walk

Experience a Story Walk through the Arroyo Viejo Creek site at the Oakland Zoo. This natural area has a safe, cleared path that participants walk through at their own pace, surrounded by nature while progressing through a custom-made children's book narrative. The plot of the tale moves further along as guests move deeper into the wilderness, creating a sense of place and immersion.

Registration required.



4/28, 2 - 4pm

Oakland Zoo

Arroyo Viejo Creek

9777 Golf Links Road

Oakland

Cost: FREE

How to Bioblitz

Interested in attending a bioblitz but not sure how to start? Intimidated by all of the different tech options for identifying the plants and animals around you? Join CA State Park Interpreter Charli who will answer all your citizen science, bioblitz, and nature technology questions and get you prepared for the upcoming City in Nature Challenge happening April 29 - May 1!

Registration required.



4/28, 4 - 5pm

Virtual Event

Visit BASF website for link

Cost: FREE

Bird Scavenger Hunt

Join the San Francisco Bay Bird Observatory for a Bird Scavenger Hunt! Anytime during the Festival (April 21 to 30), get outside and observe birds around you! All you need to do is download the scavenger hunt, find the birds, observe their behavior, and answer as many questions as you can! Attend our live virtual event to learn more about the birds and share your observations for a chance to receive a shirt.

Registration required.



4/28, 5- 6pm

Virtual Event

Visit BASF website for link

Cost: FREE

如何保護和幫助附近的各種野禽恢復健康

大家好，歡迎你們來參加矽谷野生動物救護中心（簡稱WCSV）舉辦的教育講座。我們將會用國語介紹附近的各種野禽，和一些問題可能會影響它們的生存，一些簡單的方法我們在家可以幫忙它們。我們還會介紹WCSV的職責-是一個中心負責照顧生病的，受傷的或者是被遺棄的野生動物。歡迎大家提出任何問題有關於野禽或者是附近的野生動物。

矽谷野生動物救護中心（簡稱WCSV）是一個中心負責照顧生病的，受傷的或者是被遺棄的野生動物直到它們能夠復原到可以被釋放回野外獨立生存。WCSV同時也教導大眾關於野生動物。

Join the Wildlife Center of Silicon Valley (WSCV) for an educational talk in Mandarin about local raptor species.



4/28, 6 - 7pm

Virtual Event

Visit BASF website for link

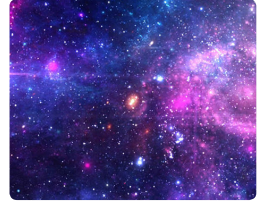
Cost: FREE

Thursday, April 28

After Dark: Dark Matter

How does our understanding of the origins of the universe continue to expand and evolve? Hear from scientists and leaders whose work is at the forefront of cosmology and essential to forming and informing humans' deepening grasp of the science of the universe. Learn about dark matter, a mysterious substance that scientists have yet to observe but assume accounts for nearly five times as much of the universe as ordinary matter.

Please visit the Festival website for full details on how to redeem a \$5 discount for admission to the Exploratorium.



4/28, 6 - 10pm

Exploratorium

Pier 15

San Francisco

Cost: Admission to the museum
(\$5 BASF discount available)

Friday, April 29

Marvelous Microscopic Marine Plankton

Join the San Francisco Microscopical Society and an Education & Outreach Specialist for NOAA's Greater Farallones and Cordell Bank National Marine Sanctuaries on a Marvelous Microscopic Marine Plankton Exploration of San Francisco Bay. This virtual event will explore elements of Biology, Oceanography, and Microscopy. We will use microscopy to highlight and share the beauty and diversity of the micro-algae and micro-animals that call our world's ocean home.

Registration required.



4/29, 3:30 - 5:30pm

Virtual Event

Visit BASF website for link

Cost: FREE

Axolotls and Hummingbirds

Animals of Mexico with KQED's Deep Look

Deep Look, la serie de videos sobre la naturaleza, le invita a una muestra virtual de videos y conversatorio sobre dos pequeños animales que habitan en México. Exploraremos cómo son y cómo se comportan los ajolotes y los colibríes. Y además conoceremos a dos científicos quienes los estudian. Este evento se llevará a cabo en inglés y en español y es presentado por KQED, el canal de medios públicos de San Francisco, California.

Join **Deep Look**, KQED's wildlife series, for a special virtual screening and discussion about unique small animals found in Mexico. We'll explore the unusual biology and behaviors of axolotls and hummingbirds, and meet scientists who study them. This event is bilingual in English and Spanish.



4/29, 5:00 - 6:15pm

Virtual Event

Visit BASF website for link

Cost: FREE

Friday, April 29

Family Maker Friday

Join us for a free community family maker event for K-12 students and their families. There will be both high-tech and classic maker activities provided. Explore microcontrollers, vinyl cutters, cardboard, 3D printing, chain mail, duct tape, virtual reality, and more! Free exploration encouraged. A minimum of one adult per family or child group requested. COVID protocols will be required as determined by the host school.



4/29, 5:30 - 7:30pm

Black Pine Circle School

2016 7th St

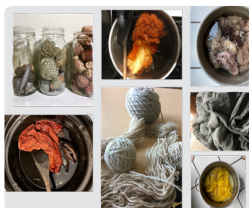
Berkeley

Cost: FREE

Natural Dyes

Colors from Water, Chemistry, and the Plants Around

Plants have a long history of being used to make pigments. Explore some of the ways natural dyes are made and learn about the science behind the process. Two graduate students at UCSF who are also extremely interested in arts and crafts will be discussing their dying process from starting materials to colorful textiles, and showing you some of the results. They have found it exciting and surprising to see these colors coming from plants around us, so join and see for yourself!



4/29, 7 - 8pm

Atlas Cafe

3049 20th St

San Francisco

Cost: FREE

Saturday, April 30

Dancing Radiation Robot!

VIRTUAL EXPLORER TOUR

In this virtual tour we will provide a sneak peek of the UCSF radiation oncology department. We will demonstrate a robotic-based linear accelerator and show how it delivers radiation to treat cancer (and dances)! Attendees will learn about the job of a medical physicist, their role in radiology and oncology at hospitals and how to become one!



4/30, 10am - 10:30am

Virtual Event

Visit BASF website for link

Cost: FREE

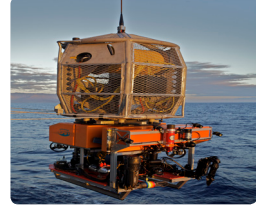
Saturday, April 30

Dive in with DOER

EXPLORER TOUR

Visit the Deep Ocean Exploration and Research (DOER) facility where underwater robotics, submersibles, and subsea systems are designed, engineered, built, and tested before being deployed on missions around the world. Learn about the type of work the vehicles do and the kinds of people who use them.

Registration required.



4/30, 10 - 11am

650 W Tower Ave

Alameda

Cost: FREE

Youth Take Climate Action - Gilman Playground

Healing the Land and Our Communities, Youth Take Climate Action is part of a City-wide Youth Service Day. Join us at Gilman Playground! San Francisco Department of the Environment's Education team and SF Rec and Park will host climate-focused service projects and lead STEM-focused activities including habitat restoration, park beautification, and hands-on activities. These projects will promote our SF climate action goals while also promoting healthy emotional wellbeing of young people.

Registration required.



4/30, 10am - 1pm

Gilman Playground

903 Gilman Ave

San Francisco

Cost: FREE

Youth Take Climate Action - Glen Park

Healing the Land and Our Communities, Youth Take Climate Action is part of a City-wide Youth Service Day. Join us at Glen Park! San Francisco Department of the Environment's Education team and SF Rec and Park will host climate-focused service projects and lead STEM-focused activities including habitat restoration, park beautification, and hands-on activities. These projects will promote our SF climate action goals while also promoting healthy emotional wellbeing of young people.

Registration required.



4/30, 10am - 1pm

Glen Canyon Park

Corner of Elk St and Chenery St

San Francisco

Cost: FREE

Saturday, April 30

Youth Take Climate Action - Lafayette Park

Healing the Land and Our Communities, Youth Take Climate Action is part of a City-wide Youth Service Day. Join us at Lafayette Park! San Francisco Department of the Environment's Education team and SF Rec and Park will host climate-focused service projects and lead STEM-focused activities including habitat restoration, park beautification, and hands-on activities. These projects will promote our SF climate action goals while also promoting healthy emotional wellbeing of young people.

Registration required.



4/30, 10am - 1pm

Lafayette Park
Gough St and Washington St
San Francisco
Cost: FREE

Youth Take Climate Action - Louis Sutter Playground

Healing the Land and Our Communities, Youth Take Climate Action is part of a City-wide Youth Service Day. Join us at Louis Sutter Playground! San Francisco Department of the Environment's Education team and SF Rec and Park will host climate-focused service projects and lead STEM-focused activities including habitat restoration, park beautification, and hands-on activities. These projects will promote our SF climate action goals while also promoting healthy emotional wellbeing of young people.

Registration required.



4/30, 10am - 1pm

Louis Sutter Playground
1150 Wayland St
San Francisco
Cost: FREE

StemFrenzy

At the StemFrenzy Festival, enjoy a day with the entire community exploring, learning, and discovering science, technology, engineering, and mathematics. This event will include hands-on activities, raffles, prizes, inspiring demonstrations from top STEM organizations and San Francisco summer programs, and more for your entire family!



4/30, 10am - 2pm

City College
50 Frida Kahlo Way
San Francisco
Cost: FREE

Saturday, April 30

SCIENCE-PALOOZA!

Meet a scientist, be a scientist! Science at Cal and the Lawrence Hall of Science are hosting a full-blown SCIENCE-PALOOZA overlooking the Bay on the beautiful and spacious outdoor plaza of the Lawrence Hall of Science. We will showcase interactive and engaging STEM activities from UC Berkeley departments, student groups, scientists, artists, designers, and our partners. Come enjoy science demos, experiments, hands-on activities, meet-the-scientists booths, and more!



4/30, 11am - 2pm
Lawrence Hall of Science Plaza
1 Centennial Drive
Berkeley
Cost: FREE

Discovery Day at CSU East Bay

Come enjoy a showcase of science, technology, and engineering-led by businesses, museums, and universities from the East Bay and beyond! With hands-on, interactive science booths and live science demos, you can explore STEM fields, engage your passions and discover new ones.



4/30, 11am - 4pm
Cal State East Bay – Hayward Campus
Science Buildings
25800 Carlos Bee Blvd
Hayward
Cost: FREE

Midpen Bayside Family Festival

Celebrate 50 years of science-based public land preservation, restoration and public enjoyment with the Midpeninsula Regional Open Space District at this free, family-friendly festival in Ravenswood Open Space Preserve and Cooley Landing in East Palo Alto. The day's events include a nature-themed scavenger hunt, plant and animal exhibits, live music, food and fun for all ages.



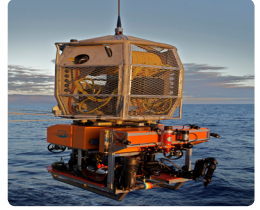
4/30, 11am - 4pm
Ravenswood Open Space
Preserve/ Cooley Landing
2100 Bay Road
East Palo Alto
Cost: FREE

Dive in with DOER

EXPLORER TOUR

Visit the Deep Ocean Exploration and Research (DOER) facility where underwater robotics, submersibles, and subsea systems are designed, engineered, built, and tested before being deployed on missions around the world. Learn about the type of work the vehicles do and the kinds of people who use them.

Registration required.



4/30, 2 - 3pm

650 W Tower Ave

Alameda

Cost: FREE

Grey Water and Wetlands

EXPLORER TOUR

The EcoCenter is an off the grid, self-sustaining educational facility and recreational center. It features a wastewater treatment system, a living roof, interior construction based from recycled materials, and a solar panel system. Tour the EcoCenter and learn about the history of the park and how the waste water treatment system models a natural wetland. Then, join our habitat restoration by transplanting native salt grass, helping restore the native wetland and provide habitat for migratory birds.

Registration required.



4/30, 2 - 4pm

EcoCenter at Heron's Head Park

32 Jennings Street

San Francisco

Cost: FREE



REDEFINING POSSIBLE:

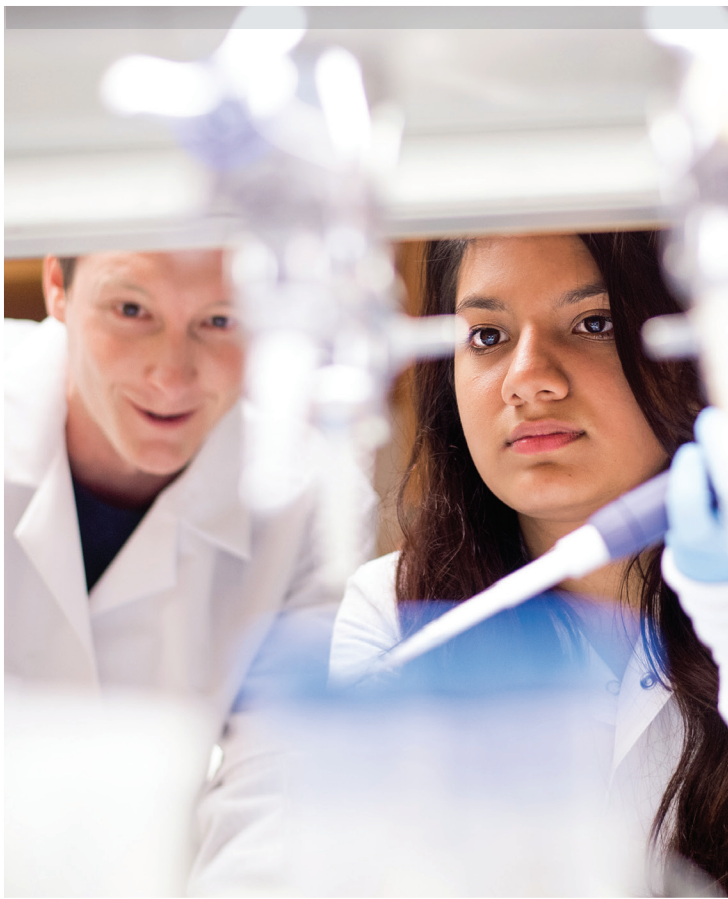
Boosting science education in public schools

Every year, UCSF invests in our community by teaching thousands of K-12 students about science through a partnership with San Francisco's public schools. Learn more about UCSF's Science Education Partnership at sep.ucsf.edu

Every year



UCSF scientist
volunteers
work with teachers
and students



of San Francisco
public schools

with a partnership
that spans



years.

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