**Thursday 10/23**
- Science @ Farmers Markets 3PM, Berkeley
- LAST Festival 6PM, San Francisco

**Friday 10/24**
- Climate Conversation 9:30AM, Stanford
- Berkeley Natural History Museums Tour 4PM, Berkeley
- Nerd Nite Block Party 6PM, San Francisco
- LAST Festival 6PM, San Francisco
- Ignite Oakland 7PM, Oakland
- Spokespeople - Search & Research 7:30PM, Berkeley

**Saturday 10/25**
- Science @ Farmers Markets 10AM, Berkeley
- Science of Bread & Cheese 10:30AM, San Francisco
- Halloween Bash 12PM, Greenbrae
- Tested.com - the Show 1PM, San Francisco
- Back in Time @ the Bay Model 1:30PM, Sausalito
- LAST Festival 2PM, San Francisco
- Math, Common Sense & Luck 6PM, San Francisco
- LAST Festival 6PM, San Francisco
- Nerd Nite Block Party 6PM, San Francisco
- Ignite Oakland 7PM, Oakland
- Spokespeople - Search & Research 7:30PM, Berkeley

**Sunday 10/26**
- Wright Canyon Hike 9AM, Clayton
- Science @ Farmers Markets 9AM, Oakland
- BioBlitzing at Muir Woods 10AM, Mill Valley
- Wetland Tour 10AM, Alviso
- Hawk Talk & Banding Demo 12PM, Sausalito
- Marin Headland's Native Plants 12PM, Sausalito
- Triple CCRMAlite: 40,50,80, 1:30PM, Stanford
- Invented in San Francisco 1:30PM, Stanford
- Celebration of the Mind 2PM, Berkeley
- Snap Judgment 3PM, San Francisco
- SF State's Marine Laboratory 2PM, Tiburon

**Sunday 10/26 cont.**
- Wonders of the Parasite World 2PM, San Francisco
- Virtual Reality in Social Science 2PM, Stanford
- Paleontology & Geology at New Brighton State Beach 3PM, Capitola
- Snap Judgment 3PM, San Francisco

**Monday 10/27**
- BAASICS: Monsters 7PM, Oakland
- Are we alone in the Cosmos? 7:30PM, San Francisco
- You're the Expert 7:30PM, Oakland
- Cataract Revolution 7PM, San Francisco
- Story Collider & Inquiring Minds 7PM, San Francisco
- The 10,000 Year Clock Project 7:30PM, San Francisco

**Tuesday 10/28**
- Science @ Farmers Markets 2PM, Berkeley
- Thinking Sound 3PM, Berkeley
- SFPU's New Sustainable Headquarters Tour 3:30PM, San Francisco
- Boy on Ice: Concussion & Sports 6PM, Menlo Park
- Madness and Memory 6PM, San Francisco
- Snap Judgment 6PM, San Francisco

**Wednesday 10/29**
- 3 Minute Thesis 4PM, San Francisco
- UPS Facility Tour 6PM, San Francisco
- Science, Neat - Alphabet 6PM, San Francisco
- Ask-A-Scientist Trivia 6:30PM, San Francisco

**Thursday 10/30**
- Wastewater Treatment Plant 3PM, San Francisco
- Creatures of NightLife 6PM, San Francisco
- GMOs in Sustainable Food 6:30PM, Berkeley
- Marissa Meyer & Marc Benioff 7PM, San Francisco

**Saturday 11/1**
- Discovery Days - North Bay 11AM, Santa Rosa
- Discovery Days - AT&T Park 11AM, San Francisco

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Event times and dates are subject to change. For the most current schedule visit [www.bayareascience.org/schedule](http://www.bayareascience.org/schedule)
Welcome...

to the Bay Area Science Festival!

It’s hard to believe that we are entering our fourth festival year. It has been tremendously rewarding to watch the growth of the festival and we are honored to nucleate connections between the Bay Area community and science, technology, engineering, and mathematics (STEM) professionals and facilities, to engage the public in STEM learning, and to highlight the hidden STEM in our community.

We’re very excited about this year’s Festival lineup. From a jubilant Block Party to kickoff the festivities, to behind-the-scenes tours of scientific facilities, to the storytelling of science, to hands-on Discovery Days for the family, there will be something for everyone, preschoolers and up! Explore all the possibilities in this Program.

The Bay Area Science Festival - and its many unique events - is truly a collaborative effort of our region’s leading science, educational, and cultural institutions. We come together to celebrate the Bay Area’s scientific wonders, resources, and opportunities and explore the role of science, engineering, and technology locally and in the world.

We offer sincere thanks to our sponsors: without their support, the Bay Area Science Festival would not be possible. We are also grateful to our many volunteers, who are committed to helping Festival events run smoothly.

We are also thrilled that this year marks the 150th anniversary of our home institution UC San Francisco. Join us in celebrating 150 years of excellence in biomedical research, education, and patient care.

The Festival is a time of wonder, and discovery. It is a time to connect with scientists who call the Bay Area home and, in so doing, inspire the scientist within you. We invite you to join us, whether for the 1st or 4th time!

Katherine Nielsen & Rebecca Smith
Co-Directors
Science & Health Education Partnership
University of California - San Francisco

UCSF
University of California
San Francisco

ONLY UCSF
150YRS

SCIENCE & HEALTH EDUCATION PARTNERSHIP
UNIVERSITY OF CALIFORNIA - SAN FRANCISCO

Bay Area Science Festival
North Bay Science Discovery Day at the Sonoma County Fairgrounds in Santa Rosa will be a hands-on science extravaganza full of fun activities for all ages. Bring the kids and unleash your inner scientist at this celebration of the Bay Area’s unparalleled leadership in science and technology. Last year, 10,000 people attended. We hope you will join us this year.

*** Event is held Rain or Shine!

This year’s highlights:

• Innovate at the Inventor’s Lab hosted by the Lawrence Hall of Science

• Taste ice cream frozen instantly with liquid nitrogen offered by the Buck Institute and Matheson Gas

• Race cars presented by the Children’s Museum of Sonoma County and Sonoma Raceway

• Observe sun spots with Robert Ferguson Observatory
Experience over 150 hands-on exhibits and activities from leading science and technology organizations from across the Bay Area. Universities, science museums, research labs, after-school organizations, and local companies join forces for an unprecedented opportunity to meet scientists and engineers. Topics include health & medicine, engineering, technology, biotechnology, climate science, and so much more. This year, every exhibit will be framed as investigative questions designed to encourage explorations and curiosity.

*** Event is held Rain or Shine!

**Highlights:**

**CHEVRON STEM ZONE** - Join us on the field and get an inside-look at the science of sports, train like an astronaut, explore robotics, and pick up a science kit.

**ORACLE MARINE SCIENCE PLAZA** - Pilot an underwater ROV, build water sensors, and explore creatures from the depths in the new area in Seals Plaza.

**LIFE SCIENCE ALLEY** - Experience the best of biotech with a dozen of the Bay Area’s leading life science companies. Extract your DNA, explore your genes, and meet the scientists engineering the next cure.

**FIRESIDE CHATS WITH SCIENTISTS & ENGINEERS** - Meet the scientists and engineers shaping our collective future in this series of informal chats in the new edible garden.

**ROBOT ZOO** - Willie Mays Plaza will be overrun by robots of all shapes and sizes, in collaboration with Silicon Valley Robotics. Interact with high school robotics teams, startup companies, and cutting edge research robots.
**Explorer Days** highlight the incredible science resources in the Bay Area by offering a series of tours, hikes and active explorations.

With 17 tours in 1 week, everyone should come out for a unique, fun and educational glimpse into the scientific wonders of the Bay Area.

**Explore:**
- Wonders of the Parasite World
- Hawk Talk and Banding Demo
- SF State University’s Bayside Marine Laboratory
- Virtual Reality in the Social Sciences
- Thinking Sound: Tour of Meyer Sound Laboratories
- UPS Facility Tour
- The Science of Bread and Cheese
- And many more......
Ever wonder how plants live? Or how worms produce compost? Curious about solar beads and solar cookers?

Get hands-on with science to find out! Join Cal scientists for some cool, food-related investigations at East Bay Farmers Markets during the Bay Area Science Festival.

(Subject to reduced hours or cancellation in event of inclement weather)

Thu 10/23 • 3 - 7pm • North Berkeley Market • Shattuck @ Rose St • Berkeley
Sat 10/25 • 10am-3pm • Downtown Berkeley Market • Center St @ MLK, Berkeley
Sun 10/26 • 9am - 1pm • Temescal Market • 5300 Claremont Ave • Oakland
Tue 10/28 • 2 - 6:30pm • Lorin (South Berkeley) Market • Adeline & 63 St • Berkeley

Organized by Science@Cal and Community Resources for Science
INSPIRE TODAY’S STUDENTS TO BE TOMORROW’S ENGINEERS.

WE AGREE.

Chevron is proud to support the Bay Area Science Festival.

Shaping our country’s future starts in our classrooms. Science, technology, engineering, and math education gives students the critical-thinking and problem-solving skills they’ll need to succeed. Because smarter kids today will lead to a more competitive America tomorrow.

Learn more at chevron.com/education

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Thursday, October 23

Hands-on Science at the Farmers Markets

Ever wonder how plants live? Or how worms produce compost? Curious about solar beads and solar cookers? Get hands-on with science to find out! Join Cal scientists for some cool, food-related investigations at East Bay Farmers Markets.

(Subject to reduced hours or cancellation in event of inclement weather)

10/23, 3 - 7pm
North Berkeley Farmers Market
Shattuck Ave. and Rose St.
Berkeley
Cost: FREE

LAST Festival

The LAST (Life Art Science Technology) Festival is a symposium and exhibition that celebrates the confluence of art with the multiplicity of new media technologies and nascent sciences emerging from the intense cultural ecosystem of the Bay Area. This LAST Festival (following the first one that was held in San Jose) will feature science talks by some of the world’s leading innovators, and host fascinating interactive digital art installations that break the “Do not touch!” taboo of traditional museums.

10/23, 6 - 11pm
The Lab
2948 16th Street
San Francisco
Cost: FREE

Friday, October 24

The Climate Conversation You Haven’t Heard

Many of us don’t want to talk about it or think about it, but extreme weather and a changing planet are a given for the 21st century. It’s a daunting problem, but there are success stories. Developing new techniques and technologies is at the heart of what Stanford and Silicon Valley do best. Policy makers, geo-engineers, human behaviorists, business leaders, scientists and tech entrepreneurs are urgently working on how we can alter and adapt to the trajectory of climate change. Join moderator Lesley Stahl for a Roundtable discussion.

10/24, 9:30 - 11:30am
Maples Pavilion
655 Campus Dr
Stanford
Cost: FREE

A Adults   T Teens   F Families
Friday, October 24

Behind the Scenes: Berkeley Natural History Museums

EXPLORER DAYS EVENT
Did you know that UC Berkeley has 6 Natural History Museums that hold 12 million specimens and represent the most complete collection of specimens of living and extinct organisms of California? Get a behind-the-scenes look at the collections that are normally closed to the public, including the Essig Museum of Entomology, the UC Berkeley Museum of Paleontology, Jepson Herbarium, and the Museum of Vertebrate Zoology.

This event is first Come, first Served. Please arrive early to secure your spot as the tour will be limited to 20 people.

Nerd Nite Block Party

We’re kicking off the Bay Area Science Festival in style by holding multiple Nerd Nite events in our first ever “block party.” Nerd Nite brings science, rock music, speed dating, field trips, gaming and, of course, beer all together for a night of epic nerdery in a 3-block radius!

• SF Game Night @ the Folsom Street Foundry
• The Phenomenauts /Crashfaster concert & Physics Circus @ Slim’s
• Nerd Speed Dating @ SOMA StrEat Food Park
• “Science… sort of” podcast @ Piston & Chain
• “How It’s Made” Field Trips

LAST Festival

The LAST (Life Art Science Technology) Festival is a symposium and exhibition that celebrates the confluence of art with the multiplicity of new media technologies and nascent sciences emerging from the intense cultural ecosystem of the Bay Area. This LAST Festival (following the first one that was held in San Jose) will feature science talks by some of the world’s leading innovators, and host fascinating interactive digital art installations that break the “Do not touch!” taboo of traditional museums.
**Ignite Oakland**

What would you share with an audience if you had just 5 minutes? Chabot and Ignite Oakland are providing a platform for people to share their passions and expertise with a live audience. The catch is they have just 5 minutes and 20 quickly changing slides to do so. The science-related topics will range from the everyday to the extraordinary. Come eat, drink and snack while meeting your neighbors and sharing in their curiosity, know-how and smarts. Afterward, stay and view the stars through one of our historic telescopes.

**Spokespeople - Search & Research**

Spokespeople is a storytelling and sometimes-bicycle-riding organization that promotes the art of storytelling by producing live community events across the San Francisco Bay Area. Through these events, Spokespeople embraces and empowers storytellers from all backgrounds, striving to create an inclusive performance space that celebrates the narratives in each of us. Spokepeople is partnering with the Bay Area Science Festival to bring you a show themed “Search & Research.”

**Hands-on Science at the Farmers Markets**

Ever wonder how plants live? Or how worms produce compost? Curious about solar beads and solar cookers? Get hands-on with science to find out! Join Cal scientists for some cool, food-related investigations at East Bay Farmers Markets.

*(Subject to reduced hours or cancellation in event of inclement weather)*

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**Friday, October 24**

- **Ignite Oakland**
  - 10/24, 7:30 - 9:30pm
  - House of Duke
  - 3133 College Avenue
  - Berkeley
  - Cost: FREE

- **Spokespeople - Search & Research**
  - 10/24, 7:30 - 9:30pm
  - House of Duke
  - 3133 College Avenue
  - Berkeley
  - Cost: FREE

**Saturday, October 25**

- **Hands-on Science at the Farmers Markets**
  - 10/25, 10am - 3pm
  - Downtown Berkeley Market
  - Center St @ MLK
  - Berkeley
  - Cost: FREE
Saturday, October 25

The Science of Bread and Cheese

EXPLORER DAYS EVENT
Get some science with your lunch! Bread and cheese are both ancient foods that owe their glory to microscopic magic. Stroll through quaint San Francisco neighborhoods while stopping at parks and shops to explore the role of unseen organisms in creating flavors and textures. Get your hands on some gluten, admire the microbes on some bloomy rinds, and enjoy a bountiful bread-and-cheese picnic at the end.

Includes tour, tastings, and lunch. Tour covers 2 miles with moderate hills. Suggested minimum age: 10

Halloween Bash - A Community Arcade
A mashup of Halloween and makers, celebrating community-made arcade games, with free trick-or-treating and a food drive. This event is the perfect mix of technology, creativity and Halloween celebration. Marin maker groups will create large games for trick-or-treaters to play, including a large-scale Rube-Goldberg style candy delivery system triggered by a can of food, and a wizard-themed experience set in an ancient castle where you can zap ghosts and other spooky monsters with your light-up magic wands!

Tested.com - the Show
Tested.com’s Adam Savage, Jamie Hyneman, Will Smith, and Norman Chan bring to the stage visions of the past, present, and future as seen through the eyes of makers. Enjoy an afternoon of fantastic homebrew projects, demonstrations of exciting new technologies, and conversations with makers about new frontiers of innovation. The show will also include a live recording of Adam Savage’s interview series The Talking Room, with a surprise guest.

10/25, 10:30am -1pm
Lafayette Park
Sacramento St & Gough St
San Francisco
Cost: $40

10/25, 12 - 4pm
Bon Air Center
Just off Hwy 101 on Sir Francis Drake Blvd
Greenbrae
Cost: FREE

10/25, 10:30am -1pm
Lafayette Park
Sacramento St & Gough St
San Francisco
Cost: FREE

10/25, 1 - 3pm
Castro Theater
429 Castro St
San Francisco
Cost: General $20, Premium $30, VIP $40
Back in Time at the Bay Model
EXPLORER DAYS EVENT
California is a brand new geological formation in a constant state of flux and at no time in its short history has it undergone as much change as it has in the last 164 years. With climate change, sea level rise, and human impact, the California of the 1850s is barely recognizable today. Watch the Bay Model fill and get familiar with the forces of nature that created the SF Bay Estuary. Learn how humans transformed the landscape, and what we can do to foster stewardship and conservation in an effort to protect and preserve our Golden State.

This tour is first come, first served and is limited to 40 attendees. Best suited for ages 10 and up.

LAST Festival
The LAST (Life Art Science Technology) Festival is a symposium and exhibition that celebrates the confluence of art with the multiplicity of new media technologies and nascent sciences emerging from the intense cultural ecosystem of the Bay Area. This LAST Festival (following the first one that was held in San Jose) will feature science talks by some of the world’s leading innovators, and host fascinating interactive digital art installations that break the “Do not touch!” taboo of traditional museums.

Mathematics, Common Sense, and Good Luck
The American Mathematical Society and the Mathematical Sciences Research Institute present the 2014 AMS Einstein Public Lecture in Mathematics with James H. Simons, the president of the Simons Foundation. Simons is a philanthropist, mathematician, investor, and financier who supports basic research in the sciences through the foundation he created with his wife, Marilyn. In this lecture, Simons will ruminate on the three intertwining subjects of his careers: mathematics, finance, and philanthropy.
Saturday, October 25

**BAHFest**

The Festival of Bad Ad Hoc Hypotheses (BAH!) is a celebration of well-argued and thoroughly researched but completely incorrect evolutionary theory. Six brave speakers will present their bad theories in front of a live audience and a panel of judges with real science credentials, who together will determine which speaker takes home the coveted sculpture of Darwin shrugging skeptically. And eternal glory, of course. Special keynote by Matt Inman, The Oatmeal.

**The Top Tourist Sights in the Solar System**

*Where Bill Gates’ Great-Granddaughter will go on her Honeymoon*

Using spectacular images from space probes and the world's largest telescopes, astro-maestro Andrew Fraknoi will explore the most intriguing future “tourist destinations” among the planets and moons in our cosmic neighborhood. Among our stops will be the 4,000-mile lava channel on Venus, the towering Mount Olympus volcano on Mars (three times the height of Mount Everest), and the awesome Verona Cliffs on the moon Miranda, the tallest “lovers-leap” in the solar system.

*If rain seems likely, call 415-455-5370.*

**Snap Judgment: Breakthrough**

NPR’s hit show Snap Judgment is back to electrify the Nourse Theater in San Francisco. It’s an ALL-NEW special performance created in association with the Bay Area Science Festival. Led by Snap’s Glynn Washington, the world’s top storytellers are coming to rock the Snap stage with brand new stories on moments of discovery. It's "Storytelling, with a beat...." LIVE! Come be part of an amazing performance filmed for Snap Judgment and recorded for broadcast on NPR.
Quiz-o-Tron 9000

Quiz-o-Tron is the world’s greatest comedic science-themed panel quiz show, hosted by Rebecca Watson and starring Bad Astronomer Phil Plait, Survivor contestant Yau-Man Chan, io9’s Annalee Newitz, local comedians Caitlin Gill and Matt Gubser, and more!! Watch as talented comedians compete against learned scientists to answer questions pertaining to the latest discoveries in astrophysics as well as whatever The Daily Mail is calling “science” these days. Audience interaction is encouraged with the chance to win fantastically terrible prizes. You will learn things you can never unlearn.

Wright Canyon Hike

EXPLORER DAYS EVENT

Join the Save Mount Diablo’s Stewardship Team for a hike of the Wright Canyon property. This 76-acre property, not open to the public, offers wonderful views of Mount Diablo’s peaks. On this hike come learn about the Morgan Fire, current research projects in the area, and the vegetation communities and wildlife that utilize them.

First come, first served – limited to 30 spots. We recommend that people have some hiking experience. Please bring plenty of water, a snack, and dress in layers.

Hands-on Science at the Farmers Markets

Ever wonder how plants live? Or how worms produce compost? Curious about solar beads and solar cookers? Get hands-on with science to find out! Join Cal scientists for some cool, food-related investigations at East Bay Farmers Markets.

(Subject to reduced hours or cancellation in event of inclement weather)
**BioBlitzing at Muir Woods**

**EXPLORER DAYS EVENT**

Join *Save the Redwoods League* and park rangers from Muir Woods National Monument as we hike the trails and conduct a mini BioBlitz. We will identify and document as many different plant and animal species as we can. Come learn about the natural history of a redwood forest, how to identify common forest plants, and which animals call Muir Woods home. You do not need to be an experienced naturalist to participate - we will learn and discover along the way.

*Bring your smartphone with the iNaturalist app pre-downloaded, have an iNaturalist account set up, and the “Redwood Watch” project selected.*

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**Wetland Tour**

**EXPLORER DAYS EVENT**

Come explore and learn about the pump and lock system that keeps the sedimentation process active to help build wetlands. Take an easy bike tour from the Environmental Education Center to pond A17, near Drawbridge. Approximately 3 miles round trip on a flat, well-maintained trail. Beautiful area with amazing flora and fauna.

*This event is first come, first served and limited to 10 participants. Recommend bringing personal water and snacks. Bikes not provided and helmets required for all riders.*

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**Hawk Talk and Banding Demo**

**EXPLORER DAYS EVENT**

The Hawk Talk and Banding Demonstration begins with docent Bridget Bradshaw speaking about hawk migration and identification and the work of the Golden Gate Raptor Observatory. She will present a newly-banded hawk, talk about the banding program, and let the hawk go in front of the crowd. It’s a great way to learn about hawks and see one up close.

*This event is first come, first served and is limited to 20 attendees.*
Marin Headlands Native Plant Science

EXPLORER DAYS EVENT
Come to the beautiful Marin Headlands to get involved in real-life botany! We will tour the native plant nursery and take a short hike. You will learn how genetic diversity is being protected in the Golden Gate National Recreation Area, gain the skills you need to contribute to national citizen science efforts, discover the many uses of native plants, and more!

Registration required. Limited to 15 participants.

Triple CCRMAlite: 40, 50, 80
Stanford University’s Center for Computer Research in Music and Acoustics (CCRMA, pronounced “karma”) has been on the scene of electronic and computer-generated sound since, well, before there was a scene. This year CCRMA celebrates three important moments: founder John Chowning’s 80th birthday; the 50th anniversary of the first computer music program on campus (in the form of a stack of punch cards); and the 40th anniversary of CCRMA. Join us for a Science Fair showcasing current student research, and a concert featuring works by John Chowning, fellow computer music pioneer Jean-Claude Risset, and CCRMA alumni Kotoka Suzuki and Leah Reid.

Invented in San Francisco

EXPLORER DAYS EVENT
Long before the silicon chip, some of the world’s most influential inventions were dreamed up by San Franciscan tinkerers. Explore seven surprising stories of innovation from tech to tunes to treats that exemplify San Francisco as a hotbed of creative thinking for nearly two centuries. We’ll investigate the science behind some of these inventions, stroll to stellar views and historic neighborhoods, and test our own powers of perception.

Includes tour and snacks. 2.3 miles, moderate with 1 challenging uphill, 2.5 hours. Suggested minimum age: 10
Sunday, October 26

**Wonders of the Parasite World**

**EXPLORER DAYS EVENT**

You are invited to a behind-the-scenes tour of a UCSF Parasitology Lab where you'll have the chance to see parasitic worms and protozoa! You'll also get to hear about research to discover drugs to treat parasitic diseases that affect millions of people worldwide. We are located at the Mission Bay campus of UCSF and parking is available in the lot across from the building ($3 all day). Please arrive on time so you get the whole tour!

*Tour is first come, first served and limited to 20 attendees. Children must be supervised by an adult.*

**Virtual Reality in the Social Sciences**

**EXPLORER DAYS EVENT**

At Stanford’s Virtual Human Interaction Lab, researchers use virtual reality (VR) to study the behavioral effects of immersive media. Visitors should be prepared to walk a virtual plank, fly around a virtual city, and travel to virtual Spain.

*All ages are invited. Not recommended for those that experience regular symptoms of motion sickness or epilepsy. Also not recommended for pregnant women, due to the vestibular nature of the equipment. Tour is limited to 20 attendees.*

**SF State University’s Bayside Marine Laboratory**

**EXPLORER DAYS EVENT**

Visit SF State’s Romberg Tiburon Center for Environmental Studies, the only academic marine lab located on the shore of San Francisco Bay. The Center is normally closed to the public, so this is a unique opportunity to see what goes on in the laboratories dedicated to studying the health of San Francisco Bay and the world’s complex marine and estuarine environments. Laboratories focusing on phytoplankton, ocean acidification, harmful algal blooms, and carbon cycling will be open and scientists will be available to answer questions. Visitors can also view live plankton on video microscopes in our teaching lab, and visit our experimental greenhouse.

*Registration required. Participants must be 11 or older.*
Celebration of Mind

Join us as we celebrate the life and work of Martin Gardner at the Mathematical Sciences Research Institute. Martin Gardner was a prolific author who pursued a playful and fun approach to Mathematics, Science, Art, Magic, Puzzles and other fascinating topics. This year’s event marks the 100th anniversary of Martin Gardner’s birth. It will include a variety of talks and engaging performances and will feature interactive activities and a wide selection of mathematical games and puzzles. Children are welcome to attend and participate in these fun activities.

Registration required.

Paleontology & Geology at New Brighton State Beach

EXPLORER DAYS EVENT

Come take a closer look at the sea cliffs at New Brighton State Beach. The rocks forming these dramatic cliffs are part of the Purisima Formation, which is exposed along the California Coast from Point Reyes to southern Santa Cruz County. We will discuss the formation of marine sedimentary rocks, examine the fossils at New Brighton Beach, discuss the processes responsible for preserving fossils, and learn about the ancient seafloor environment in which these fossils are preserved! You are guaranteed to see fossils of ancient clams, snails, and whales.

This event will be first come, first served, limited to 40 total participants. You must be willing to get your feet wet. We will be mostly walking on beach sand, but we will also have to navigate large slippery rocks on the beach. This is not wheel chair accessible.

Snap Judgment: Breakthrough

NPR’s hit show Snap Judgment is back to electrify the Nourse Theater in San Francisco. It’s an ALL-NEW special performance created in association with the Bay Area Science Festival. Led by Snap’s Glynn Washington, the world’s top storytellers are coming to rock the Snap stage with brand new stories on moments of discovery. It’s “Storytelling, with a beat...” LIVE! Come be part of an amazing performance filmed for Snap Judgment and recorded for broadcast on NPR.
Monsters brings together a diverse group of artists, scientists, and performers to consider all manner of monsters. Professor John Hafernik will introduce the audience to a parasitic fly that turns honey bees into ZomBees; author Erik Butler will explain how literature and film have made the vampire, a native of Eastern Europe, into a naturalized American with a preference for the Golden State; artist Brynda Glazier will showcase her charismatic sculptures and discuss cultural standards of ugliness and "otherness." Join BAASICS co-founders and producers Selene Foster and Christopher Reiger for an entertaining evening of art, science, and wonder. It's going to be scary good!

Are We Alone in the Cosmos?

When science fiction portrays the galaxy as an arena of interstellar commerce and, occasionally, of star wars, could it be accurate? We now know that billions of hospitable, Earth-like planets are sprinkled throughout our Milky Way Galaxy. Yet billions of short-term searches for ET have turned up nothing. Where is everybody?! Premier planet hunter Geoff Marcy and expert alien detective Dan Werthimer will debate this most fascinating of scientific questions: Are We Alone in the Cosmos?

You’re the Expert

You’re the Expert is a new radio program on 90.9 WBUR, Boston’s NPR station. Hosted and produced by Chris Duffy, each show features an expert in a specialized field. Through games, sketches, and hilariously misguided guesses, three comedians try to figure out what our expert studies all day. The show ends with an interview where we hear about their latest findings and why their field is important. You’re the Expert is funny, it’s interactive, and you end up actually learning something. Featuring panelists Myq Kaplan (Comedy Central), Nato Green (FX’s Totally Biased), and Anna Drezen (MTVu).
Hands-on Science at the Farmers Markets

Ever wonder how plants live? Or how worms produce compost? Curious about solar beads and solar cookers? Get hands-on with science to find out! Join Cal scientists for some cool, food-related investigations at East Bay Farmers Markets.

(*Subject to reduced hours or cancellation in event of inclement weather*)

Thinking Sound

EXPLORER DAYS EVENT

With more than 40 patents on technology ranging from its Constellation digital acoustic system to premium loudspeakers, Meyer Sound is recognized as a major force in the professional audio industry worldwide. Take a look inside its factory and see how loudspeakers are built from the inside out. Tour the manufacturing facility and experience a demonstration of one of the world’s most versatile, unique, and natural-sounding theatre environments.

Registration is required. The tour is limited to 20 participants. All must be 13 and older. Photography is not allowed on the tour.

Tour SFPUC’s New Sustainable Headquarters

EXPLORER DAYS EVENT

A wonderful opportunity to tour one of the greenest buildings in the country, San Francisco Public Utilities Commission (SFPUC)’s headquarters. Attendees will have a chance to learn about the green building features such as consumption of 32% less energy, 50% less carbon footprint and 60% less water than similarly sized buildings, an onsite “Living Machine” that reclaims and treats all of the building’s wastewater, and unique seismic safety features. In addition, attendees will be able to witness how the building integrates a digital arts wall and a Rain Portal art installation in a working environment.

Registration is required. The tour is limited to 20 participants. Tour guests under 18 must be accompanied by an adult/guardian.
Widely regarded as the toughest man in the NHL, Derek Boogaard was a gentle man off the ice but a merciless fighter on it. But, behind the scenes, Boogaard’s injuries and concussions were mounting and his mental state was deteriorating, culminating in his early death from an overdose of alcohol and painkillers. Boogaard’s story raises deep and disturbing questions about the systemic brutality of contact sports and the damage that reaches far beyond the game. We’ll discuss the current science and technology being used to diagnose and detect these injuries and what that may mean to the future of these sports.

In his book, Nobel Prize winner Stanley Prusiner tells the remarkable story of his discovery of prions - infectious proteins that replicate and cause disease - but surprisingly contain no genetic material. He recounts the frustrations and rewards of years of research and offers fascinating portraits of his peers as they raced to discover the causes of fatal brain diseases. Prusiner’s hypothesis, once considered heresy, now stands as accepted science and the basis for developing diagnoses and eventual cures.

The lens is a remarkable structure that plays a critical role in the optical system of the human eye. An overview of the lens, including embryologic development, biochemistry, and physiology, will lay the foundation to a discussion about diseases of the lens, including pediatric- and adult-onset cataracts. Cataract surgery has evolved over centuries and new procedures aim to perfect the optical system of the eye in addition to cataract removal. Surgical videos and information on the latest lens implants, as well as considerations for simultaneous correction of near-sightedness, far-sightedness, presbyopia, and irregular corneal shape, will be featured in this talk.
Tuesday, October 28

**Story Collider & Inquiring Minds Live**


**The 10,000 Year Clock Project**

Human civilization is about 10,000 years old. If you wanted to build something that would last the next 10,000 years, as an icon of long-term thinking, what materials would you use? How would you prototype and test the design? Alexander Rose is part of the team that is building a mechanical, astronomical Clock at monument scale that will run for ten millennia. Alexander will discuss Clock project details like hollowing out a mountain with giant custom-made robots and share his research into projects built to last a millennium or more, including the arctic Seed Vault in Svalbard and the ultra-secret Mormon genealogical vaults in Salt Lake City.

Wednesday, October 29

**3 Minute Thesis**

Three Minute Thesis is a research communication competition first developed by the University of Queensland in Australia. Like the original competition, the 3MT at UCSF challenges graduate students to present a compelling presentation of their dissertation research in just three minutes, using language appropriate for a non-specialist audience. 3MT is not an exercise in trivializing or dumbing-down research; rather, it is meant to incentivize students to clarify their ideas and to help others understand and appreciate the significance of their research. At this event, the finalists in the 3MT competition will present their research in front of the judges and a live audience.
EXPLORER DAYS EVENT
Tour the UPS San Francisco Facility and watch how UPS moves thousands of packages through its facility to provide next day delivery for a package picked up in San Francisco and destined for any address in the US.

Please make sure to wear close-toed shoes. Minimum age: 16 years old.

Science, Neat – Lounge
Grab a drink and hit the back patio of the El Rio for an intimate evening of interactive science at Science, Neat. This month, step into the “Lounge” and meet 5 scientists who will share their research and how science has shaped them personally in surprising ways. Lightning talks start at 6:30pm and are followed by the chance to talk with the presenters at interactive stations about the heart of their research. Like always, Science, Neat is PowerPoint-free, hands-on science.

Ask-a-Scientist Trivia Night
Ready to put your science smarts to the test? Ask-a-Scientist will be celebrating the Bay Area Science Festival the best way we know how - with a boisterous science trivia contest hosted by Robin Marks of Discovery Street Tours. (It’s just like a pub trivia night, but without all those other boring categories.) Even if you don’t know your cortex from a coprolite, come enjoy a night of fascinating science trivia and general revelry. You can bring your own team of ringers with you, assemble a team with others on the spot, or just come to cheer, hang out, and learn stuff. The winning team will receive an awesome prize and a really cool feeling of superiority that should last at least several days. Six people max per team. Bring your own writing utensils.
EXPLORER DAYS EVENT

Have you ever wondered what happens to the dirty water from your shower, laundry and toilet after it goes down the drain? What about the runoff from lawns and gardens, rainwater and car washing? You’ll see first-hand what happens after you flush the toilet, learn about the wastewater treatment process, and what we do to make sure we protect public health and the environment. You will also find out what you can do to help prevent pollution.

Registration is required. The tour is limited to 40 participants. All participants must be 10 and older.

Creatures of the NightLife

The creatures come out at night as NightLife partners with the Bay Area Science Festival for an evening of spine-tingling delight on Halloween. Discover the science and spectacle behind werewolves, vampires, zombies and other creatures that go bump in the night. Set out with friends on a journey to the stars and to the depths of the sea with a cocktail in your hand and wonder in your eyes—only at NightLife at the California Academy of Sciences.

21+, ID required for entry.

The Role of GMOs in Sustainable Food

We care about the food we eat. So, what should we know about GMOs? Three eminent scientists from UC Berkeley present basic scientific principles behind Genetically Modified Organisms and provide the socioeconomic and environmental implications of their use. Bringing sound expertise to this controversial subject are Professors Patricia Zambryski (Plant & Microbial Biology), Sarah Hake (Plant Development & Plant Architecture), and David Zilberman (Agriculture & Resource Economics). The discussion will be moderated by Robert Jacobsen, Professor of Physics and Interim Dean of Undergraduate Studies.

10/30, 3 - 5pm
Southeast Wastewater Treatment Plant
750 Phelps St
San Francisco
Cost: FREE

10/30, 6 - 10pm
California Academy of Sciences
55 Music Concourse Dr
San Francisco
Cost: $12

10/30, 6:30 - 8pm
UC Berkeley
Banatao Auditorium
Sutardja Dai Hall
Berkeley
Cost: FREE
Marissa Mayer in conversation with Marc Benioff

Presented by INFORUM, Marissa Mayer, President and CEO, of Yahoo will be featured in conversation with Marc Benioff, Chairman and CEO, Salesforce.com.

Marissa Mayer is the CEO of Yahoo and is one of very few women to have run a Fortune 500 company. In 2013, Mayer earned the number one spot on Fortune Magazine’s 2013 “40 Under 40” list. Her boldness has made her a household name, and she was awarded INFORUM’s 21st Century Visionary Award.

Saturday, November 1

Discovery Days - North Bay

North Bay Science Discovery Day at the Sonoma County Fairgrounds in Santa Rosa will be a hands-on science extravaganza full of fun activities for all ages. Bring the kids and unleash your inner scientist at this celebration of the Bay Area’s unparalleled leadership in science and technology. Innovate at the Inventor’s Lab, taste ice cream made instantly with liquid nitrogen, explore race cars and observe sun spots.

Discovery Days - AT&T Park

Experience over 150 hands-on exhibits and activities from leading science and technology organizations from across the Bay Area. Universities, science museums, research labs, after-school organizations, and local companies join forces for an unprecedented opportunity to meet scientists and engineers. Topics include health & medicine, engineering, technology, biotechnology, climate science, and so much more. Highlights include the Chevron STEM Zone, Oracle Marine Science Plaza, the Robot Zoo, Life Science Alley, and Fireside Chats with Scientists.
There’s No Place Like Home

After a decade in the works, UCSF Medical Center at Mission Bay – an innovative complex that promises to transform care for children, women and cancer patients – will open on Feb. 1, 2015.

This facility joins our Parnassus and Mount Zion medical centers in advancing our mission of caring, healing, teaching and discovering.

missionbayhospitals.ucsf.edu

UCSF Medical Center

UCSF Benioff Children’s Hospital
is created by the Bay Area's science, educational, and cultural institutions and organized by the Science and Health Education Partnership (SEP) at UC San Francisco.
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*Note: The list includes various companies and organizations that have supported different initiatives or events, including technology, healthcare, and educational initiatives.*