

# 13<sup>TH</sup> ANNUAL LOS ALAMOS SCIENCEFEST



This year, Los Alamos ScienceFest is coming to you virtually! We're expanding the experience to offer the same great lectures, discussions, live demonstrations and engaging Science, Technology, Engineering, Art and Math (STEAM) activities. Join this year's Los Alamos ScienceFest 20/20: Eyes on the Future from home!

## Two Ways to Join as an Attendee

Via the Mobile App - Download the Whova app for free, sign up for a free account. You'll receive an access code and link by email for you to login via the Desktop Web App directly, if you later choose to use that platform instead of the mobile app.

Via the Desktop Web App - Want to login from your computer? Plan ahead and register for ScienceFest here. Then on Tuesday, July 7 (ScienceFest Kickoff), login to the ScienceFest Web App using the same email address.

\*Please keep in mind that it may take up to 24 hours before you have access to the Desktop Web App after registering with Eventbrite.



Post your inspiring
ScienceFest photos
to Facebook, Twitter,
Instagram and Snapchat
using our hashtag
#LosAlamosScienceFest2020

Visit our Virtual Info Booth for your chance to win some great prizes!



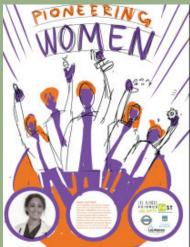


# Pioneering Women in Los Alamos:

# **An Historical Poster Trail**

In honor of the centennial anniversary of women's right to vote, Los Alamos MainStreet, Los Alamos Chamber of Commerce, the Los Alamos Historical Society, LANL and Triad, LLC and Del Norte Credit Union are debuting posters July 7-12

featuring women in Los
Alamos who have been
pioneers in advancing their
respective fields, from the
Manhattan Project days, to
today. Local businesses and
organizations around Los
Alamos County will be
displaying these posters
throughout the summer.
So, get out, explore, look
for the posters highlighting
these amazing women,



and you'll also have a chance to solve a puzzle (please refer to our map as a starting point)! A special thanks goes to recent Los Alamos High School graduate Emily Holmes, who put in countless hours to build profiles for these women as part of her Girl Scout Gold Award.

# EYE on the Prize! A BreakOUT Box Scavenger Hunt

A breakout box is a box secured with a six lock hasp. Teams need to solve clues in order to get the combinations for each lock in order to open the hasp and unlock the box. Clues can be solved in any order and can vary greatly in difficulty. A smaller box can also be secured with a single lock in order to reveal the clue sheet for a large box. Participate virtually, or in-person, and uncover clues that lead you around Los Alamos. An immersive, learning platform with different boxes for different audiences and skill levels. Winners will be entered into a raffle for some cool prizes! More details on LosAlamosScienceFest.com



In honor of Women's History Month earlier this year, the Lab also remembered the hundreds of women who worked as part of the Manhattan Project at Los Alamos to develop the world's first nuclear weapons, which helped end World War II. Their pictures and stories are part of the private collection of the National Security Research Center, the Lab's classified library.





RESEARCH CENTER

### TUESDAY • JULY 7 • 7:00 PM



Pat Brown, CEO & Founder of Impossible Foods, a company at the forefront of making nutritious, delicious meat and dairy products from plants to satisfy meat lovers, addresses the environmental impact of animal farming. Ask questions live, or submit in advance to lauren@losalamos.org

Register at LosAlamosScienceFest.com

IMPOSSIBLE"

# FOR LIVE WITH MISS AMERICA 2020, Miss Camille Schrier Virtual "Blood Bubbles"

DEMONSTRATION AND CLASSROOM CHAT

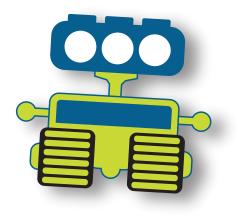
Miss Camille Schrier, a STEM advocate who holds biochemistry and systems biology degrees, will engage with students about pH, the blood, and why we breathe in this fun demonstration. Have a chance to ask questions live, or submit in advance to lauren@losalamos.org.

Register at LosAlamosScienceFest.com





All events are free schedule subject to change



#### **TUESDAY 7.7**

5:00 PM Tuesdays \*Not\* at the Pond: A Performance with Auto Electric

Fun and Classic Rock-n-Roll Visit CreativeLosAlamos.com

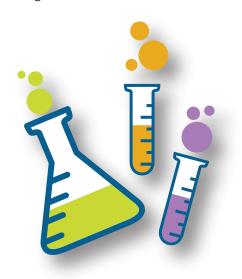
#### 6:00 PM RoboRAVE Robot Challenges

Play online, code, and compete with others around the world on a wide range of monthly robot challenges - free during ScienceFest week!

#### 7:00 PM

# A Conversation with Pat Brown, CEO & Founder, Impossible Foods

Impossible Foods is at the forefront of making nutritious, delicious meat and dairy products from plants to satisfy meat lovers. Brown will address the environmental impact of animal farming in this interactive session.



### **WEDNESDAY 7.8**

#### 12:00 PM Brownbag Lunch Panel: DNA Simulation

Join LANL scientist Dr. Karissa Sanbonmatsu, who conducts research on DNA simulation and gene-mapping. This event should be engaging for all ages!

#### 6:00 PM The Future of Energy

Join Explora as we investigate humanity's greatest resource: electrical energy! We'll take a look at electrical phenomena with shocks, sparks, and plasma balls! We'll then explore how electricity gets from power plants to your home, and how we manage energy for the future.

#### 7:00 PM

#### The Trinity Test: A Live Lecture with Lab Historian Alan Carr

Join Los Alamos National Laboratory Historian Alan Carr as he reflects on the 75th Anniversary of the Trinity Test. Discover the stories and challenges of Project Y and how science at Los Alamos shaped our world.

#### 8:30 PM (dusk)

#### Drive-in Movie - Central Park Sq North Parking Lot

A free screening of "The Jetsons Meet the Flintstones." Advance registration required. Sponsored by Los Alamos County, Los Alamos MainStreet and Creative District, and Central Park Square.

#### THURSDAY 7.9

# 12:00 PM Future of Cybersecurity Panel Discussion

Hear from several cybersecurity experts based in Los Alamos, and what the future holds in the field.

#### 5:30 PM

Space Veggies: How quantum dots help grow vegetables on Earth and in Space. Dr. Matt Bergren, the Chief Product Officer at UbiQD, Inc., explores how nanotechnology can improve growing vegetables on Earth and in Space.

#### 6:30 PM

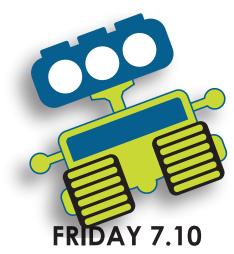
#### From Trinity to Today: How Los Alamos National Laboratory employees innovate and protect our nation

Thom Mason, the Director of Los Alamos National Laboratory, explores the Laboratory's innovations and projects, the ability of tech transfer to bring discoveries into the wider world, global STEM-related challenges and opportunities, and emerging areas for the Laboratory and its mission.

#### Tag Los Alamos ScienceFest in photos of you engaging in Discovery Day!

#### #LosAlamosScienceFest2020

Visit the ScienceFest Virtual Info Booth for your chance to win some great prizes!



#### 11:00 AM – 12:30 PM Virtual Tour at UNM-LA

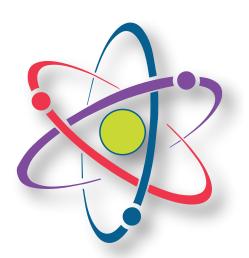
The virtual tour of UNM-Los Alamos will examine the EMS classroom and simulation lab, including the Ambulance simulator and demonstrations using the programmable mannequins. A second tour will include the welding laboratory, with demonstrations using the plasma cutter and welding equipment.

#### 6:00 PM Friday Night Summer Concert Series: Live with Austin Van

Get your dancing shoes ready, it's Country night to celebrate Los Alamos ScienceFest week!

# 7:00 PM The Future of Manned Space Exploration

Join Rick Wallace for a discussion of current plans and studies related to commercial space travel, the status of NASA's proposed Moon orbital space station, the Artemis moon landing program, and current plans for colonizing Mars.



# SATURDAY 7.11 DISCOVERY DAY 10 AM - 3 PM

Visit the virtual exhibitor booths to learn about various organizations engaging in Science, Technology, Engineering, Art and Math (STEAM) fields, recorded videos and live discussions, ideas for activities to try at home, and fun raffle prizes and giveaways!

Segments that will go LIVE are marked, but is not inclusive of all the virtual booth content. Login to the mobile event app, Whova, or via the Desktop Whova App to view all virtual booths!

#### 10:00 AM

#### LIVE with Miss America 2020, Miss Camille Schrier – A Virtual "Blood Bubbles" Demonstration and Classroom Chat

Miss Camille Schrier, a STEM advocate who holds biochemistry and systems biology degrees, will engage with students about pH, the blood, and why we breathe in this fun demonstration. Have a chance to ask questions!

10:00 AM
LIVE with TechSource

11:00 AM
LIVE with The Education Plan

11:30 AM

LIVE with the Superintendent of Los Alamos Public Schools

11:30 AM

LIVE with UNM-LA Computer Science Faculty Dr. Joan Lucas. Dr. Lucas will demonstrate, "Machine Learning and Neural Networks".

#### 12:00 NOON

#### LIVE with the Third Annual Electric Vehicle Show

Brought to you by the Department of Public Utilities and PEEC, interact live with the owners of several different types of electric vehicles for a virtual tour of their cars! 12:30 PM
LIVE with the Bradbury Science
Museum

1:00 PM LIVE with a Docent from the National Museum of Nuclear Science & History

1:30 - 2:00 PM

LIVE with Los Alamos Public Schools "Where in the World is Topper?"

Receive video clues from around the world that examine biomes and ecosystems in the different regions, which includes plants and animals! Be entered into a drawing for fun prizes!

#### 2:00 PM

LIVE with PBS Science Café: Animal Espionage on the Pajarito Plateau

Camera and drone technologies are allowing scientists to watch animals more closely than ever before, without disturbing them. Capturing everything from the unexpected to the comical, these technologies are giving wildlife managers insights that could ultimately help them fight extinction and habit loss.

# Sunday 7.12

#### 2:00 PM

# Virtual Screening of "Just Eat It: A Food Waste Story"

Presented by Los Alamos County Environmental Services Department, view this 74-min extended version documentary, where filmmakers and food lovers Jen and Grant dive into the issue of waste from farm, through retail, all the way to the back of their own fridge.

# Around 8:30 PM (dusk) Movie After Dark: Blast From the Past

Join us outdoors at Bathtub Row Brewing Co-op for this fun, romantic comedy featuring Brendan Fraser and Alicia Silverstone about a man who lived his entire life in confinement in a fallout shelter and suddenly emerges when he's sent on a dangerous restocking mission. Limited seating, so arrive early!



# 20x20 ART CHALLENGE EXHIBITS!

# Location: Los Alamos Creative District, near Fuller Lodge

The Los Alamos Creative District. Fuller Lodge Art Center, and the Los Alamos Arts Council are sponsoring an art competition designed to inspire and share creativity in the Los Alamos downtown area during ScienceFest. Twenty artists were given a 20x20 inch panel on which they created something that highlights the 2020 ScienceFest Theme - 20/20: Eyes on the Future. All submissions will be on display outdoors during ScienceFest week July 7-12 along the sidewalks in the Creative District. near Fuller Lodge. Judging will take place on July 7, with awards and



prizes given to the top choices in each category. Come take a look at what our local creatives have done! Post your favorites using the hashtag #LosAlamosScienceFest2020









## **BUSINESS SPECIALS DURING**

The Karen Wray Gallery



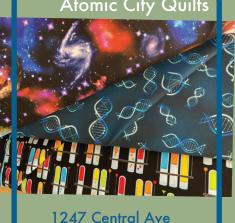
1247 Central, Ste D Visit the website for Atomic Pottery!

Gillian's Flowers



3801 Arkansas Ave Special \$10 bouquet during ScienceFest week!

Atomic City Quilts



Science mask fabrics!

Bathtub Row Brewing Co-op



163 Central Park Sq. During ScienceFest, swing

Boese Brothers Brewpub



145 Central Ave. Stay hydrated at Boese Bros with a Dr Strangelove IPA.

Village Arts



216 DP Rd All kinds of fun STEAM activities! LA Arts Council is also giving away free kite kits at the Fuller Lodge Art Center & Farmers' Market.

Petree Garden Center



2470 E Rd. The new Terrarium Bar; come create your own terrarium tropical plants!

#### Bennett's Fine Jewelry



107 Central Park Sq Get your custom ATOM necklace!

#### Los Alamos Nature Center



## 2600 Canyon Road

Visit the online store for a lot of science gifts! Just click the "support" tab on peecnature.org







## **BUSINESS SPECIALS DURING SCIENCEFEST!**

# Gadgets Museum Shop Goes Online

1350 Central Ave



The Bradbury Science Museum Association (BSMA) is delighted to announce that the Gadgets Museum Shop is launching their online store just in time for ScienceFest. Gadgets is located inside the Bradbury Science Museum and has been closed since March, so the BSMA decided to open the online shop. The new online shop, Gadgets @ the Bradbury can be found through the BSMA's website: bradburyassociation.org. Gadgets sells many LANL logo'd items and Manhattan Project National Historical Park gear, as well as as fun science toys and books. For questions or more information, visit the website or call (505)927-3887. Merchandise can be shipped or curbside pickup is available. The proceeds from the museum shop support the efforts of the BSMA to promote STEM learning and scientific literacy all over northern New Mexico through workshops, field trips, special events and support for museum and community educators. Become a member and receive a discount on all Gadgets' merchandise.

# Pajarito Brewpub & Grill and Sirphey



#### 614 Trinity Dr and 1793 Deacon St.

Try the Impossible Foods meatless burger (and hear from the CEO of Impossible Foods on Tuesday, July 7 at 7pm, with a live virtual discussion!)

#### Blue Window Bistro



1789 Central Ave

Try the Oppie-tini speciality cocktail!

Ruby K's Bagel Cafe



1789 Central Ave
Green Chile Cheddar Bagel
– since it's the bomb!

#### Los Alamos History Museum



1050 Bathtub Row Shop the online store for many cool science gifts!

#### Los Alamos STEAM Lab



LAsteamLab.com

"Learning Python in Minecraft" class & STEAM rentals. Check out the website for details!

# SCIENCEFEST IS PROUDLY SPONSORED BY





where discoveries are made



























#### **PARTNERS**

BRADBURY SCIENCE MUSEUM, EMILY HOLMES, EXPOLRA, LOS ALAMOS ARTS COUNCIL, LOS ALAMOS CHAMBER OF COMMERCE, LOS ALAMOS COUNTY COMMUNITY SERVICES DEPARTMENT, LOS ALAMOS COUNTY PARKS & REC, LOS ALAMOS COUNTY DEPARTMENT OF PUBLIC UTILITIES, LOS ALAMOS HISTORICAL SOCIETY, LOS ALAMOS NATIONAL LABORATORY COMMUNITY PARTNERSHIPS OFFICE, LOS ALAMOS PUBLIC SCHOOLS, MANHATTAN PROJECT NATIONAL HISTORICAL PARK, PAJARITO ENVIRONMENTAL EDUCATION CENTER, SANCRE PRODUCTIONS, THE MISS AMERICA ORGANIZATION

## **ORGANIZERS**

Los Alamos MainStreet and Los Alamos Creative District