

# **FESTIVAL SUMMARY**

NCSciFest is the first statewide celebration of its kind in the nation. This April, we celebrated a showcase of STEAM — science, technology, engineering, arts, and mathematics — acknowledging the arts as an essential part of learning and expression.

Community-based events were hosted by museums, science centers, colleges, universities, businesses, parks, libraries, and hundreds of K-12 schools around NC. Founded in 2010 by Morehead Planetarium and Science Center, NCSciFest has served more than 3 milion participants of all ages from all 100 counties since its inception.

# **ADVISORY BOARD**

CHRISTY L. SHAFFER, PH.D., Chair Hatteras Venture Partners

**BETSY BENNETT, PH.D.** 

ALFRED G. CHILDERS. PH.D. MagellanScience.org

MARILYN FOOTE-HUDSON NC GlaxoSmithKline Foundation

ANN B. GOODNIGHT SAS

JOHN HARDIN, PH.D. NC Department of Commerce

**DELISHA HINTON** Wolfspeed

HOWARD N. LEE Howard N. Lee Institute

MATTHEW MEYER. PH.D. NC Community Colleges

**CHANCELLOR EMERITUS JAMES** MOESER UNC-Chapel Hill

LOUIS MUGLIA, M.D., PH.D. Burroughs Wellcome Fund

THAN POWELL Epulate

**STEPHANIE PRICE-DAVID Gilead Sciences** 

**CHANCELLOR TODD ROBERTS** NC School of Science and Mathematics

CHARLES A. SANDERS, M.D. Retired Chairman & CEO, GlaxoSmithKline

G. EDWARD STORY, J.D. RTI International

**RICHARD SUPERFINE, PH.D.** UNC-Chapel Hill

**DEB THOMAS. PH.D.** UNC-Charlotte

JULIA WHITE NC Governor's Office

CHANCELLOR W. RANDOLPH WOODSON NC State University

WAYNE ZUNIC. PH.D. Biogen

# CONTACT

Morehead Planetarium and Science Center

The University of North Carolina at Chapel Hill

> Campus Box 3480 Chapel Hill, NC 27599-3480







# **NCSCIFEST TEAM**

**ERIK MACINTOSH** NCSciFest Manager erikmac@unc.edu

**TODD BOYETTE, PH.D.** NCSciFest Co-Founder todd\_boyette@unc.edu

**CRYSTAL HARDEN, ED.D.** Director of Program and Inclusion Initiatives

charden@unc.edu

**STEPHANIE RIDLEY** Director of Advancement stephanie.ridley@unc.edu

**ADAM PHELPS** NCSciFest Sponsorships arphelps@unc.edu

**CHRIS KATELLA** Marketing and Communications Manager ckatella@unc.edu

# **Dear NCSciFest Partners,**

This year's Festival was chock-full of amazing experiences, from huge wonders of STEAM to scientists taking over middle school classrooms.

-

Best wishes and Science for All, Todd & Erik

Tode Boythe

Todd Boyette, NCSciFest Co-Founder



Eil montose

Erik MacIntosh. NCSciFest Manager

MAR

# **FULL STEAM AHEAD**

The 2023 Festival theme celebrated the intersection of arts and sciences and also reflected the return of full-scale events after a few years of pandemic-related challenges.

The **Google Gravity Games** returned to Lenoir for the first time since 2019, where 36 teams from across the state raced their homemade, gravity-powered cars through downtown streets.

"I had several community members approach me and express how happy they were for their children to be exposed to fun things in STEM. There are not many STEM resources in Fayetteville. This event allowed community members to learn about the FSU Planetarium and our other STEM outreach programs." - Joseph Kabbes, Fayetteville State University

Crowds showed up to big events like the UNC Science Expo, UNC Greensboro Science Everywhere, and Piedmont Earth Day Festival. More than 40 events were attended by more than 500 people.





# FOR THE LOVE OF SCIENCE

This year, we saw an amazing outpouring of passion from our STEM partners. From informal science educators to seasoned STEM professionals, this year's festival was indeed Full STEAM Ahead!

"People enjoyed the event so much that they were asking when is the next one! Thanks NCSciFest for the help and support to provide an event like this to the children and families in our community."

> -Amani Fields, Daniel Center for Math and Science

# **ARTS EVENTS**

To celebrate our theme of Full STEAM Ahead, two partners created works of art that will last beyond the month of April and highlight the interwoven connections between science and the arts. Craven Community College's Havelock campus and the UNC Nutrition Research Institute in Kannapolis worked with local artists to design and install murals that welcome people to their campuses.





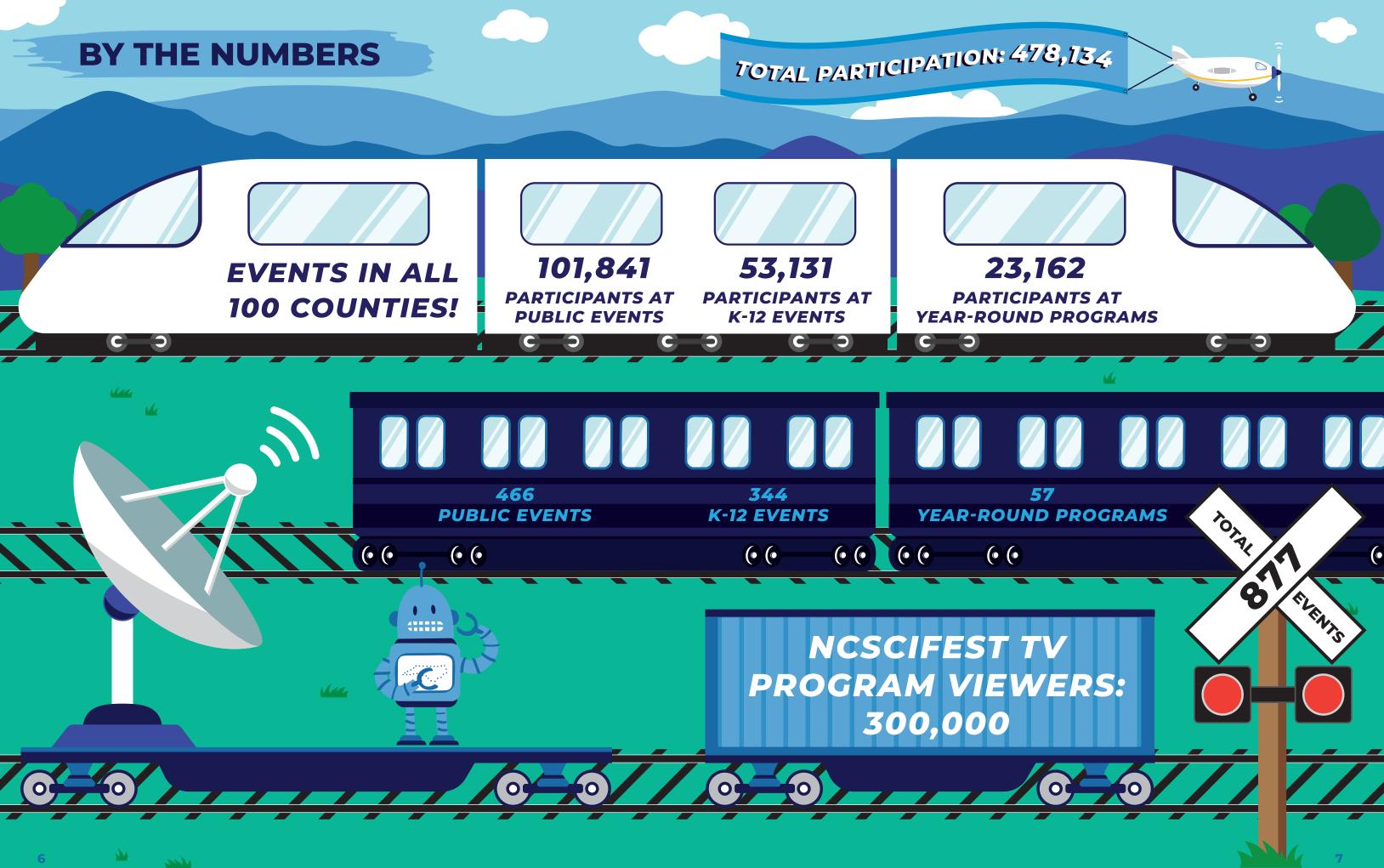


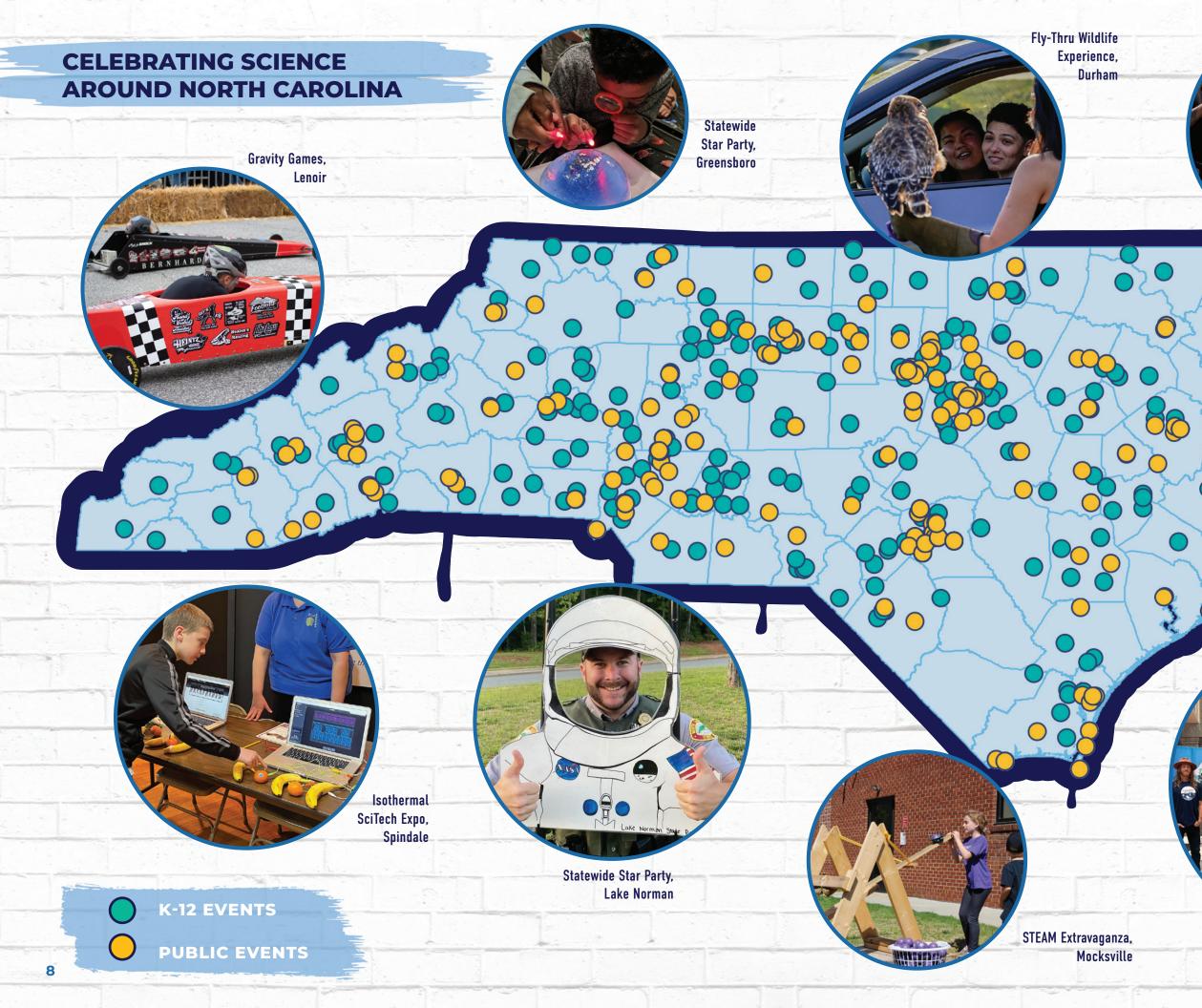




**APRIL SHOWERS BRING STEM FLOWERS!** This April saw some rainy weekends across much of the state, but that didn't put a damper on the fun!









Plastic Ocean Arts & Sci Fest, Wilmington

9

# **SCIENCE FOR ALL**

One of this year's signature events was the inaugural Science For All Summit – a brand new conference hosted by Morehead Planetarium and Science Center focused on Inclusion, Diversity, Equity, and Access (IDEA).

Educators, practitioners, researchers, thought leaders, and other change agents engaged in conversation and knowledge building around emerging issues and innovative strategies related to advancing IDEA in STEM.



# STEMVILLE SCIENCE SPECTACULAR

Hosted by Morehead Planetarium and Science Center with the support of Gilead Sciences, STEMville Science Spectacular brought students from underserved backgrounds to Morehead to engage in science in a fun and exciting way. Led by scientists predominately underrepresented in STEM fields, students from local community organizations participated in hands-on science activities and a planetarium show in the GSK Fulldome Theater.

"OMG! The kids had a great time on Saturday! The students really enjoyed themselves and asked if we could do something like that again."

- Dr. Sheena Fletcher, Cardinal Charter

# **K-12 INITIATIVES**



### SCIMATCH

More than 50 scientists visited middle schools during the month of April, taking over classrooms for a day to share their stories and lead hands-on activities with students. More than 4,000 students got to interact directly with a scientist, many for the first time ever!







### DUKE ENERGY SCIENCE NIGHTS

A total of 48,719 participants attended Duke Energy Science Nights held at 186 schools across 95 NC counties. Most occurred outside school hours, bringing together students, families, teachers, and school leaders. The versatility of the hands-on STEM activities, Spanish versions of the instructions, and NC Connections allowed for engagement by a broad audience.

"Our students, families, and staff had so much fun connecting over STEM activities and pizza. Thank you to North Carolina Science Festival for all the materials!"

- Duke Energy Science Night host



# **BEHIND THE SCENES**

The festival wouldn't be possible every year without this amazing team who design the t-shirts and posters, train scientists to share their research, connect with school partners, coordinate event logistics, and so much more.

# **PARTNER ORGANIZATIONS**

### The North Carolina Science Festival would like to thank the following partners for their leadership in sharing STEM with their communities.

Acme Delco Elementary School After School Brilliance Ahoskie Elementary School Alamance Community College Alamance County Public Libraries Alamance Virtual School Alpha Academy Charter School American Renaissance School Animal Park at the Conservators Center Appalachian State University: Dark Sky Observatory Mathematics & Science Education Center Aquadale Elementary School Aquarium & Shark Lab by Team ECCO ArtSpace Charter School Asheville Makers Asheville Museum of Science Asheville Radio Museum Astronomy on Tap: Triangle Aulander Elementary School

Ackland Art Museum

B.F. Grady Elementary School **Badin Elementary School Bailey Elementary School** Bald Head Island Conservancy Banoak Elementary School **Bearfield Primary School** Beaufort Elementary School



Benton Heights Elementary School of the Arts Bentonville Battlefield State Historic

Site Bethel Elementary School Bethesda Elementary School Blue Jay Point County Park Blythe Elementary School Bonlee Elementary School **Braswell Memorial Library** Broad Creek Middle School Broadway Elementary School Brookside Elementary School Brown Education Initiative Brunswick Community College **Buckland Elementary School Buncombe County Public Libraries Burton Elementary School** Butner-Stem Elementary School Cabarrus County Public Library:

- Harrisburg Branch
- Kannapolis Branch
- Midland Branch
- Cabarrus Health Alliance
- Camden Intermediate School
- Cape Fear Botanical Garden
- Cape Fear Middle School
- Cape Fear Museum
- Cape Hatteras Elementary School
- Carolina Community Academy at North Elementary School
- Carolina Raptor Center
- Carolina Wetlands Association
- Carteret Community College
- Catawba County Library: St. Stephens Branch
- Catawba Science Center
- **Central Elementary School** (Albemarle)
- Central Elementary School (Barco) Central Elementary School (Jackson) Chapel Hill Public Library

"There's nothing we enjoy more than igniting the love and wonder of science in the hearts and minds of students of all ages...Being part of this year's **NC Science Fest was an absolute** pleasure."

> - Dr. Kim Jones, Brunswick Community College

- Charlotte Hawkins Brown State Historic Site
- Charlotte Motor Speedway
- Chase Middle School
- Cherokee County Schools: 21st Century Community Learning Center Programs
- Children's Museum of Jacksonville
- China Grove Elementary School
- Chinquapin Elementary School
- City of Charlotte: Landscape Management
- City of Durham: Parks and Recreation
- City of Kannapolis: Parks and Recreation
- City of Lenoir
- City of Raleigh: Durant Nature Preserve
- **Claremont Elementary School**
- **Clarke Elementary School**
- **Clement Elementary School**
- **Cognition Davie**
- College of The Albemarle
- Columbia Middle School
- Community School of Digital and Visual Arts
- Cooleemee Elementary School
- Core Sound Waterfowl Museum & Heritage Center
- Cowan Museum of History and Science
- Cramerton Middle School
- Craven Community College

Creedmoor Elementary School of the Arts

- Cumberland County Public Library & Information Center:
- Bordeaux Branch
- · Cliffdale Regional Branch
- · East Regional Branch
- Headquarters Library
- Hope Mills Branch
- North Regional Branch
- · West Regional Branch

D.C. Virgo Preparatory Academy D.F. Walker Elementary School Davidson County Online Academy Davie County Virtual School **Deyton Elementary School** Discovery Place Kids: Rockingham **Discovery Place Nature Discovery Place Science** Dobson Elementary School Drexel Elementary School E.J. Hayes Elementary School East Albemarle Elementary School East Alexander Middle School East Franklin Elementary School East Hoke Middle School

- East Rockingham Elementary School
- Eastern Wayne Elementary School Eastfield Global Magnet School Edneyville Elementary School Elizabeth City State University Empower All Inc.
- Endy Elementary School Enka Intermediate School
- Eno River Academy **Ephesus Elementary School**
- Fairview Heights Elementary School
- Falkland Elementary School Fascinate-U Children's Museum Fayetteville State University FIRST North Carolina Flat Rock Elementary School Flyleaf Books
- Forest Hill Elementary School
- Frank Porter Graham Bilingue Elementary Franklinton Middle School Frederick Douglass Elementary School Cultural Resources Gaston Virtual Academy Gibson Elementary School Google Graham Middle School Green Valley School Greene County Schools Clay Branch Greensboro Science Center Grier Middle School Guilford Technical Community College: Cline Observatory Hands On! Childrens Museum Haw River Elementary School Hawk Eye Elementary School Hazelwood Elementary School Herbert Akins Road Elementary School Hertford Grammar School

Forest Hills Global Elementary Forestville Road Elementary School Foust Elementary School

Franklinton Elementary School Franklinton High School Math Club

Full STEAM Ahead Carolina Inc. Fuquay Varina Middle School G.W. Bulluck Elementary School

Garner Parks, Recreation and

Gaston STEM Leadership Academy

Gatesville Elementary School

Glade Creek Elementary School

Grantham Elementary School

Green Ridge Elementary School

Greene County Intermediate School

Greensboro Public Library: Kathleen

Hayesville Elementary School

Haywood Community College

Haywood County Public Library

Hertford County Public Library Hiddenite Elementary School Highland Renaissance Academy **Highlands Biological Foundation** 

Hillsborough Arts Council Historic Edenton State Historic Site Hodge Road Magnet Elementary School Hominy Valley Elementary School IC Imagine Public Charter School Ignite Online Academy Imagination Station Science and History Museum Isothermal Community College J.R. Ingram Elementary School J.T. Barber Elementary School J.W. Coon Elementary School Jackson County Public Library Jackson Park Elementary School James Sprunt Community College Jamesville Elementary School John Small Elementary School Johnsonville Elementary School Johnston Charter Academy Johnston Community College Jonathan Valley Elementary School Jones Senior High School Jonesville Elementary School Kaleideum KidSenses Children's Museum

Kidzu Children's Museum

Kings Creek School

**KIPP Halifax College Preparatory** School

Laurel Park Elementary School Leaksville-Spray Elementary School Lee County Libraries: Suzanne Reeves Branch

Leland Middle School Lewisville Elementary School Liberty Drive Elementary School Liberty Elementary School

> "This was really awesome! I've never gotten to see the moon or stars through a telescope before."

> > - Statewide Star Party attendee

# **PARTNER ORGANIZATIONS, CONT'D**

Lincoln County Public Library Lincoln Elementary School Locust Elementary School Lucama Elementary School Madison Middle School Malpass Corner Elementary School Manchester Elementary School Marbles Kids Museum Margaret Willis Elementary School Mariam Boyd Elementary School MarineQuest at UNC Wilmington Mary Scroggs Elementary School Mattamuskeet School Mayland Community College Mayland Earth to Sky Park McDougle Elementary School McDowell Nature Center Methodist University Micaville Elementary School Millingport Elementary School Mocksville Elementary School Monroe Avenue Elementary School Montclaire Elementary School Moore County Schools Morehead Planetarium & Science Center Moss Hill Elementary School Mount Airy Museum of Regional History Mountain View Elementary School Muddy Sneakers Museum of Coastal Carolina Museum of Life and Science N.L. Dillard Middle School NASA Solar System Ambassadors Nash Community College Nash Everywhere Digital Academy

NC A&T State University

NC Aquariums:

Fort Fisher

Pine Knoll Shores

Roanoke Island

- NC Central University: Fab Lab NC Coastal Land Trust
- NC Geological Survey
- NC Maritime Museum in Beaufort
- NC Museum of Natural Sciences:
- Contentnea Creek
- Prairie Ridge Ecostation
- Raleigh
- NC School of Science and Mathematics
- NC Science Olympiad
- NC Science Trail NC State Laboratory of Public
- Health
- NC State Parks:
- Carvers Creek State Park
- Cliffs of the Neuse State Park
- Dismal Swamp State Park
- Fort Macon State Park
- Gorges State Park
- · Hammocks Beach State Park
- · Jordan Lake State Recreation Area
- Kerr Lake State Recreation Area
- Lake Norman State Park Merchants Millpond State Park
- · Pilot Mountain State Park
- NC State University:
- Catalyst
- Sustainability Office
- NC Virtual Academy
- NC Zoo
- Newport Middle School
- Newton Conover Middle STEM School
- Noble Academy
- North Elementary School
- North Graham Elementary School
- North Kannapolis Elementary School
- North Rowan High School
- North Shelby School
- Northeast Academy for Aerospace and Advanced Technologies

Northeast Elementary School Northern Granville Middle School Northwest Elementary School Norwood Elementary School Oakboro Choice STEM School Oaks Road Academy **Oxendine Elementary School** P.W. Moore Elementary School Page Street Elementary School Pamlico County Middle School Pamlico County Primary School Park View Elementary School Parkside Elementary School Paul J. Ciener Botanical Garden Paw Creek Elementary School PBS North Carolina Pearsontown Elementary School Pembroke Elementary School Perquimans County Middle School Pettigrew Library **Piedmont Environmental Alliance Piedmont Environmental Center** Piedmont Wildlife Center Pine Forest Middle School Piney Creek School Pinkston Street Elementary School

- Plain View Primary Elementary School
- Plastic Ocean Project
- Poplar Springs Elementary School
- Princeville Elementary School
- Pumpkin Center Intermediate School
- Queen Anne's Revenge **Conservation Lab**

"We appreciate your support and letting the kids know their talents and abilities are needed to build a diverse, inclusive and innovative STEM Workforce!" - Joann Blumenfeld,

Catalyst at NC State University

"The most important science we saw all weekend was the chemistry between people in a community coming together to learn, laugh, and get to know each other better." - Pepper Hill, Science Alliance of Eastern NC

R. Brown McAllister STEM Elementary Reedy Creek Elementary School Reedy Creek Magnet Middle School Center for the Digital Sciences Reidsville Middle School Renaissance West STEAM Academy Richfield Elementary School River Bend Middle School **River Park North Riverside Elementary School Riverwood Middle School** Robbinsville High School **Robeson Planetarium and Science** Center **Rocky Point Elementary School** Rose Hill-Magnolia Elementary School **Rosman Elementary School** Rowan Public Library System Rowan-Cabarrus Community College S. Ray Lowder Elementary School Saluda Elementary School Sandhills Community College Sandhills Farm Life Elementary School Schiele Museum School for Creative Studies Science Alliance of Eastern NC Scotland Neck Elementary School Scurlock Elementary School Shawboro Elementary School Sheep-Harney Elementary School Smokey Mountain Elementary School South Brunswick Middle School South Elementary School (Mebane) South Elementary School (Roxboro) South Piedmont Community College Southwest Elementary School Southwestern Community College

STEM Passport STEM West Sturgeon City The ArtsCenter Wilmington Science **Historic Site** Town of Carrboro Town of Nashville Two Mules for Haiti **Protection Agency** Asheville: Chapel Hill: Arts Everywhere Charlotte

Greensboro: RISE Network

Pembroke

#### Southwestern Randolph Middle

- Southwood Elementary School
- Sparta Elementary School
- Spindale Elementary School
- St. Thomas More Catholic School
- Stanfield Elementary School

School

- Summit K-8 Virtual Academy
- Surry Community College
- Swain West Elementary School
- Sycamore Lane Elementary School
- Sylvan Heights Bird Park
- T.S. Cooper Elementary School
- The Children's Museum of
- The Children's Playhouse
- The Daniel Center for Math and
- Town Creek Indian Mound State
- Transylvania County Schools
- Triangle Land Conservancy
- Tyrrell Elementary School
- Union Elementary School (Clinton)
- Union Elementary School (Rowland)
- Union Elementary School (Shelby)
- **United States Environmental**
- University of North Carolina at
- Society of Physics Students
- University of North Carolina at
- University of North Carolina at
- University of North Carolina at
- Three College Observatory
- University of North Carolina at

University of North Carolina Nutrition Research Institute

- Uwharrie Charter Academy **Elementary School**
- Valley Springs Middle School
- Vance Virtual Village Academy
- Vanceboro Farm Life Elementary School
- Vance-Granville Community College
- Vick Elementary School
- Wake County Government
- Wake Technical Community College
- Ward Elementary School Warsaw Elementary School
- Washington County Library
- Washington Elementary School
- Watauga Virtual Academy
- Wayne Community College
- Wellcome Middle School
- West Hoke Elementary School West Middle School
- West Oxford Elementary School West Smithfield Elementary
- School
- Wilburn Elementary School Wiley Magnet Middle School Wilkesboro Elementary School William H. Owen Elementary
- William T. Brown Elementary School
- Winston-Salem Preparatory Academy
- Winston-Salem State University





The North Carolina Science Festival is made possible by the generous support of its sponsors.





DIAMOND CHAMPION



PLATINUM SPONSORS





**GOLD SPONSORS** 



**Sas** 





PROUDLY PRODUCED BY

PBS CAROLINA

POWERED BY THE UNC SYSTEM



triangle media Honeywell

**BRONZE SPONSORS** 





MOREHEAD PLANETARIUM+ SCIENCE CENTER

Visit NCSciFest.org to learn more about how you can participate.