2013 ANNUAL REPORT











About This Report

The Science Festival Alliance (SFA) is a professional association of independent science and technology festivals. We are dedicated to encouraging and supporting both new and existing festivals, and to fostering an international conversation about how to make public science events more meaningful, engaging, and instructive.

This annual report provides information in two distinct categories:

1) **member activities**—the accomplishments of the independently organized science festivals that comprise the membership of the SFA; and

2) **network activities**—SFA efforts that support the exchange of inspiration, advice, and resources among member festivals.

Each SFA member science festival in 2013 was the unique product of the community in which the event took place. Most of these festivals featured scores of activities, many of which may change substantially from year to year. This makes it a challenge to succinctly summarize even one science festival, let alone the operations of all of the SFA's many members. Nevertheless, this annual report provides a useful snapshot of member activities in 2013 based on voluntary self-reporting.

In addition, this report provides a glimpse into the kinds of SFA network activities members have found useful within the past year—including sharing advice and inspiration with fellow members, trading festival planning documents, and participating in the SFA's meetings over the phone and in person.

I love learning from other festivals! Plus it helps us build support for our local efforts when we talk about how our work is informed by and informs celebrations in other communities across the country.

Gerri Trooskin, Director, Philadephia Science Festival



Waco Cultural Arts Fest Science Festival



Eureka! Festival

ROLAND LORENTE



Arizona SciTech Festival

January 16, 2014

When the Science Festival Alliance was founded in 2009, the goal of the organization was simply to help get a few independently organized science festivals up and running and to see how the festival concept would play out in different cities around the United States.

By the beginning of 2013, the landscape had changed significantly. As it turned out, that festival concept multi-day, multi-venue, massively collaborative, communitywide celebrations of science and technology—did indeed work well in different cities and states. Remarkably, each new science festival that started inspired others to step forward and try the concept in their own regions. Looking back, the rapid proliferation of independently organized science festivals is the SFA's big story for 2013.

The SFA launched its membership program just over a year ago, closing out 2012 with 17 members. By the end of 2013, that number had more than doubled to 42. New funding for the SFA from the National Science Foundation and the Alfred P. Sloan Foundation has provided crucial support to fuel this growth. The dedication of experienced festival organizers has also played a significant role: new festival initiatives have emerged in 2013 thanks to the many days and weeks selflessly spent by established SFA members volunteering to help new members get off the ground.

However, successful, sustainable science festivals cannot be helicoptered in from the outside. The real force powering this growth comes from the communities themselves. Today, I am delighted to report that more than 2,700 organizations collaborated on SFA member festivals last year—together creating events that drew almost 1 million people to engage with science all over the country.

Each new science festival that starts draws in new audiences and new collaborators. Each new festival also represents a chance for the SFA and its members to learn more about what is possible. Many of the SFA's 41 members are right now planning their first-ever celebrations for 2014. I cannot wait to see what new stories, new experiences, and new ways of doing things emerge in the year ahead.

Ben Wiehe Manager, Science Festival Alliance MIT Museum



Philadelphia Science Festival THE FRANKLIN INSTITUTE



Wisconsin Science Festival WISCONSIN ALUMNI RESEARCH FOUNDATION



Indian River Lagoon Science Festival

MITCH KLOORFAIN

The Science Festival Alliance has become the go-to group for us to vet ideas and think through challenges as we head toward our audacious goal of 1 million people eventually celebrating science with us in North Carolina each year.

Science Festival Alliance Members Celebrating in 2013

Arizona SciTech Festival February 6–March 17, 2013

Bay Area Science Festival October 24–November 2, 2013

Cambridge Science Festival April 12–21, 2013

Celebrate Science Indiana September 6, 2013

Colorado Springs Science Festival October 5–15, 2013

Ignite Innovation: Dayton Regional Science Festival November 15–24, 2013

Eureka! Festival June 14–16, 2013

Harmony Dark Sky Festival February 2, 2013

iExplore STEM Iowa January 26–November 21, 2013

Indian River Lagoon Science Festival September 28, 2013

Jacksonville Science Festival April 25–27, 2013

Las Vegas Science Festival April 28–May 4, 2013

Long Island Sound Science Festival June 30, 2013

MSU Science Festival* April 12–21, 2013 Nebraska Science Festival* April 12–14, 2013

New Hampshire TechFest October 12, 2013

North Carolina Science Festival April 5–21, 2013

Philadelphia Science Festival April 18–28, 2013

Randolph College Science Festival March 21-24, 2013

Rio Grand Science and Arts Festival (RiSA)* October 12, 2013

San Diego Festival of Science and Technology March 16–23, 2013

SCOPE Science & Technology Days August 13, 2013

Silly Science Sunday (renamed to 7 Days of STEM for 2014) September 22, 2013

Seattle Science Festival June 6–16, 2013

Sitka Whale Fest October 31–November 3, 2013

St. Petersburg Science Festival October 15–19, 2013

Texas A&M Physics and Engineering Festival April 5–6, 2013 Tinkerfest* September 21–22, 2013

Waco Cultural Arts Fest ScienceFest* September 27–30, 2013

Wisconsin Science Festival September 26–29, 2013

* First celebration in 2013

SFA Members Celebrating in 2014 or Later

The Arlee Celebration Science Festival

Arkansas Science Festival

Atlanta Science Festival

Charleston STEM Festival

Connecticut Science Festival

Hawaii Science Festival

Jackson Hole Science Festival

Maine Science Festival

Southern Kentucky Science Festival (SKySci)

Super Science Weekend: NY Capital Region SciFest

USA Science and Engineering Festival

Virginia Science Festival

For a map and calendar of upcoming science festival activity, visit www.sciencefestivals.org/go-toa-festival

Teens need to be exposed to people with exciting careers in order to consider their own futures. NH TechFest tries to connect teens with the latest in STEM and the people developing those innovations. Yvonne Tsai, Founder, New Hampshire TechFest

2013 SFA Member Activity by the Numbers*

985,134 Total number of people who visited an SFA member festival

2,649 Total number of events and programs produced by SFA member festivals

79 SFA member festival events that drew more than 1,000 visitors

SFA member festival events that drew more than 10,000 visitors

7,714 STEM practitioners taking an active role in an SFA festival

8,77

Volunteers helping out SFA member festivals in 2013

Our festival is encouraging children who don't think of themselves as scientists to find out otherwise through collaboration with area industry and subject experts and interactive exhibitions.

Nadia Hionides, Founder, Jacksonville **Science Festival**

2,721 Organizations collaborating with an SFA member festival in 2013

million

Total funding raised to support SFA member festivals in 2013

Number of 2013 SFA member festivals with a budget over \$250,000

\$3,500 Lowest festival budget among SFA member festivals in 2013

\$975,425 Highest festival budget among SFA member festivals in 2013

* Figures reflect data reported by 30 SFA member festivals celebrating in 2013



Cambridge Science Festival

Independent Evaluation of SFA: Key Findings

From 2009 to 2012 Goodman Research Group Inc. (GRG), an external research and evaluation firm, collected data at four independently organized festivals (Cambridge Science Festival, San Diego Festival of Science & Engineering, Philadelphia Science Festival, and Bay Area Science Festival). In 2013 GRG produced an analysis of this data, finding those four festivals to be successful at meeting key goals such as engaging hard-to-reach audiences in science education, and involving science, technology, engineering, and math (STEM) professionals in public outreach. Some of these findings are highlighted below. For the full report, download the Three-year NSF Evaluation Final Report: *sciencefestivals.org/resources*.

Lasting Results

The evaluators found that most attendees were motivated to follow up in some way on what they had learned at a science festival. More than two-thirds said the festival had inspired them to search for more information on a covered topic.

Reaching Underserved Groups and Families

Science festivals are well positioned to support the participation of underrepresented groups and families in informal science education. For example, of the minority members surveyed, more reported the festival had given them their first substantive interactions with STEM practitioners as compared to white visitors.





Among festival attendees who completed GRG surveys, minority respondents were more likely than white visitors to report never before having had substantive interactions with science practitioners of the type offered by the festivals.

Value Added by STEM Professionals

Interaction with STEM practitioners during SFA science festival events was found to correlate with greater benefits for attendees. Across the four festivals, 88% of respondents had at least one type of interaction with a science professional, while only 12% had no interaction at all. In many cases, attendees were interacting with STEM professionals for the first time.

Percentage of Respondents Reporting Quite a Bit or A Great Deal of Impact, by Level of Interaction with Science Professionals



The three types of interaction were: 1) attendee heard a STEM practitioner talk about his/her work; 2) attendee did a hands-on activity with a STEM practitioner; and 3) attendee voiced a question or comment to a STEM practitioner.

The Wisconsin Science Festival is one of the best field trip experiences I have ever done with my class, and I have been teaching for three decades!

Wisconsin Science Festival Attendee

Festivals Make the News: A Sampling of SFA Members in the Media

Click on any news item to be brought to the story.



Putting the Fun Back into Fundamental Science *National Public Radio*, June 4, 2013

The Philadelphia Inquirer

A Little Science and a Lot of Fun on the Parkway The Philadelphia Inquirer, April 21, 2013

The Charlotte Observer

Alton Brown Brings His Science Show to Charlotte *Charlotte Observer*, April 19, 2013

San Jose Mercury News

Bay Area Science Festival: Robot 'Zoo' Brings Together Kids, 'Bots San Jose Mercury News, November 2, 2013

PNAS The Role of Science Festivals Proceedings of the National Academy of Sciences, February 19, 2013

LSJ

Learning, Theater Mix at MSU Science Festival Lansing State Journal, April 14, 2013

Dayton Daily News

Science Festival Offers Events for Non-Science Types Dayton Daily News, November 9, 2013



Secrets of the Sea Discovered at St. Pete Science Festival Bay News 9, October 19, 2013

Forbes

Back Off, Man. I'm a Scientist! Greene, Carroll, and Frank Open SeattleScience Festival 2013 *Forbes*, June 9, 2013



Science Program Aims to Interest Girls Fox 5 San Diego, January 23, 2013

The Boston Blobe

Cambridge Science Festival, By the Numbers Boston Globe, April 6, 2013

San Francisco Chronicle

Science Festival Spans 10 Days, Many Sites San Francisco Chronicle, October 20, 2013

weekly

Winners, Losers, Observers, Culprits: Whalefest Explores Arctic Sea Change Capital City Weekly, November 6, 2013

Science opens doors to the future, and science festivals make those doors accessible to everyone.

Renee Leone, Coordinator, MSU Science Festival

SFA Network Activity in 2013

Major Funding

The Science Festival Alliance received financial support in 2013 from two major sources: the National Science Foundation and the Alfred P. Sloan Foundation.

The National Science Foundation provided funding for work done by the MIT Museum, the Franklin Institute, the Morehead Planetarium and Science Center at the University of North Carolina, and the University of California-San Francisco. The funding was used to provide mentoring for new science festivals and to expand the capacity of science festivals to capitalize on four distinct strengths of the science festival format:

- Having a positive impact on large public audiences through innovative live events;
- Serving traditionally hard-to-reach audiences, including underserved communities and the science inattentive;
- Involving STEM practitioners directly in public outreach; and
- Leveraging the collaboration inherent in a festival into even greater regional campaigns.

The Alfred P. Sloan Foundation provided funding to foster festivals in communities with relatively limited resources. Twelve awards to new festival initiatives were made through this program in 2013, with each receiving challenge grants, mentoring, and travel support for festivals launching in 2014. Along with SFA staff at the MIT Museum, lead collaborators included the Wisconsin Science Festival, St. Petersburg Science Festival, Colorado Springs Science Festival, and SCOPE Science & Technology Days.

Science Festival Alliance Activities

The SFA continued to develop its membership program in 2013, working to ensure that SFA member festivals can draw on the collective wisdom, collegial support, and friendly competition of a community of festival organizers to continuously improve the quality of their offerings. SFA membership is available free to any festival willing to commit to active participation in the SFA network. Some numbers reflecting this activity can be found on the next page.

Early in 2013 the SFA launched its redesigned website at *www.sciencefestivals.org*. This site—along with accompanying communication tools—served as a clearinghouse of information about science festival activity throughout the year. The SFA also proactively reached out to more than 50 US communities to encourage them to become involved in new science festival initiatives. This work was accomplished with the help of Julie Fooshee, who joined the Science Festival Alliance full-time as coordinator in 2013, doubling the SFA's staff at the MIT Museum.

Additional SFA activity in 2013 included a significant presence at the following events:

- American Association for the Advancement of Science Annual Meeting, Boston, MA
- Coalition for the Public Understanding of Science Unconference, Monterrey, CA
- Florida Association of Museums Annual Conference, Fort Lauderdale, FL
- Evolving Culture of Public Engagement Workshop, Cambridge, MA
- Association of Science-Technology Centers Annual Conference, Albuquerque, NM

The inaugural Atlanta Science Festival would not be happening in 2014 if it were not for the support of the SFA. The advice, materials and support of the members of the SFA have helped us through all the bumps we've encountered along the way. Meisa Salaita, Co-Founder, Atlanta Science Festival

SFA Impact by the Numbers

Benefits of SFA Network

93%

communicated with fellow SFA members

75% participated in an SFA quarterly members meeting

75% shared planning documents with other SFA members

50% hosted a visit from other festival organizers

81 % plan to attend 2014 International Public Science Events Conference





ANDY MARTIN: DURHAM PERFORMING ARTS CENTER



plan to participate in informal 93%* communication with other SFA members in 2014

80%*

plan to participate in an SFA conference call or video conference in 2014

80%

plan to visit another festival in the coming year

* Figures reflect self-reporting by 16 science festivals that were SFA members for all of 2013.

** Figures reflect self-reporting by 40 SFA member festivals

Our state has seen a strong

surge in interest, directly

due to SFA.

Cynthia Kramer, Executive Director, SCOPE Missouri



Las Vegas Science Festival



Long Island Sound Science Festival JIM DESMOND



Texas A&M Physics and Engineering Festival



Sitka Whale Fest



MIT Museum N52-200 77 Massachusetts Ave. Cambridge, MA 02139

Online: www.sciencefestivals.org

Email: connect@sciencefestivals.org

Phone: (617) 806-6369

Cover photos clockwise from top left: Math Midway 2 Go at Bay Area Science Festival MSU Science Festival PHOTOGRAPHER PAUL PHIPPS Bay Area Science Festival

Nebraska Science Festival

Supported by:



The National Science Foundation under grant numbers 0840333 and DRL-1223256.



The Alfred P. Sloan Foundation's Public Understanding of Science and Technology Program.

This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License. All photos in this document were reproduced with permission from the festivals named and may not be used for any other purpose without the individual festival's express consent. Reuse of or references to this work must include attribution to the Science Festival Alliance. The remainder of this work is licensed under the Creative Commons Attribution To view a copy of this license, visit *http://creativecommons.org/licenses/by-nc-sa/3.0/*.