

Cornerstones of Science









Awakening Curiosity, Enriching Lives

Helping Communities Explore Science

Science is a language of hope and inspiration, providing discoveries that fire the imagination and instill a sense of connection to our lives and our world...We must embark on a cultural shift that places science in its rightful place alongside music, art and literature as an indispensable part of what makes life worth living."

- Brian Greene, physicist and author, New York Times, June 1, 2008

Cornerstones of Science acts as a catalyst, linking public libraries with scientists to bring science alive in communities. Its programs and resources help people gain direct experiences of science, technology, engineering and mathematics (STEM). With support from Cornerstones, libraries transform into community science centers where people can enjoy thought-provoking activities that expand their perspectives and improve their lives.

Mission

Cornerstones of Science works with libraries to create experiences of science that spark curiosity and foster a deeper connection to the world around us.



So many issues we confront have to do with science, and if people aren't informed, they can't be good citizens."

-- Cornelia Dean, former New York Times science editor

1999

2005

2006

2009

2012

Lee & Lulu Grodzins support the founding of Cornerstones at Curtis Memorial Library in Brunswick, ME With strong support from Thermo Fisher Scientific, Cornerstones' network grows to include 22 partner libraries

Cornerstones and Curtis Memorial Library receive the **Public Library Association's Highsmith Library** Innovation Award

Cornerstones of Science becomes a 501(c)3 nonprofit organization

American Science & Engineering helps Cornerstones launch core programs like the STAR Program and Library Partner Summit



To help people appreciate how science affects their daily lives, Cornerstones offers Science Connects Us Kits that librarians use to foster public discussions of timely issues (such as food insecurity and preventive medicine). These kits include compelling age-appropriate books, hands-on STEM activities, and traveling exhibits that generate scientific insights, helping inform the decisions of library visitors.

Inspired by a Cornerstones of Science "watchable wildlife" iniative. Windham Public Library has become a Monarch Watchdesignated butterfly waystation.

> Cornerstones of Science helps librarians become local champions of science. Cornerstones' Library, Partner Development Program offers librarians science-based professional development workshops and other scientific resources (including some seed grants to facilitate shared scientific outreach). Cornerstones hosts an annual Library Partner Summit where librarians can forge ongoing collaborations in STEM.

Cornerstones of Science helps librarians engage people in scientific exploration. Among its most popular offerings are traveling Science Trunks, filled with hands-on STEM activities intriguing to both adults and children, that librarians can use in programs or share on display. First circulated in 2009, Cornerstones' Science Trunks now number 12 and reach 200 libraries each year.



"What I like is to see people experience an 'ah ha' moment. When we bring in new Cornerstones telescopes and introduce librarians to how they work and what they offer, there's always some apprehension. But when they leave, each participant cuddles that telescope like a child."

Ron Thompson, Cornerstones Telescope Advisor, and Treasurer of Southern Maine Astronomers

Scientific Interest

Scientific

Findings

Support

Scientific

Outreach

5

CORNERSTONES: Fostering Scientific Discovery Step-by-Step

> **Engage** in Scientific Reasoning

Scientific

Knowledge

Create a

Scientific

Network

Cornerstones encourages partner libraries to host Community Reads (concurrent book discussion groups) and Science Cafés (informal get-togethers where people can chat with scientists about their research). These informal STEM discussions strengthen public understanding of the scientific process.

ongoing opportunities for the public to make first-hand scientific observations. In its first year, the STAR Program helped more than 30 libraries secure high-quality telescopes and get training support from regional astronomy clubs, stimulating greater knowledge of astronomy. One small-town library reported that 53 people attended its first star-gazing party. People can check out a telescope as they would a book—exploring the night sky with friends and family.

The STAR (Sharing Telescopes and Astronomy Resources) Program,

one of Cornerstones' Loanable Scientific Tools initiatives, provides

To help libraries locate knowledgeable and engaging presenters in STEM fields, Cornerstones is building the Maine Science Provider **Network**, an interactive online database of skilled STEM providers eager to share their research with the public. This pioneering Network makes STEM more accessible, helping citizens better understand how science and technology shape their lives.



In partnership with Cornerstones, the Portland Public Library hosted Silent Spring Re-visited, a series of science cafés with University of Southern Maine faculty highlighting progress and ongoing challenges in environmental toxicology. These events were among 70 Cornerstones programs led by 25 scientists on that theme in 2012.

We're thinking more broadly than book selection. We're thinking programming. We want to spark the curiosity and creativity of our community. Cornerstones of Science gives us a shot in the arm, encouraging us to try out new ideas and scientific activities."

-- Linda Putnam, Research and Information Services Director, Portland Public Library

Extending the Reach of Public Libraries

Cornerstones of Science provides libraries with the tools and support they need to engage people in experiential learning, reawakening a sense of wonder about the natural and physical world. Public libraries are becoming community science centers where people can gather informally and expand their understanding of STEM. Cornerstones helps public libraries:

- 1) Create library spaces that enhance scientific discovery
- 2) Access scientific resources, tools and training
- 3) Make and sustain connections to scientific organizations, institutions and services

Support from Cornerstones helps librarians, such as Amy Hand at the Camden Public Library, integrate science into routine offerings like children's story hour.





Cornerstones of Science 14 Maine Street, Suite 215 Brunswick, ME 04011 www.cornerstonesofscience.org

Cynthia Randall, Executive Director cynthia.randall@cornerstonesofscience.org 207-208-8975

Help make a difference!

Cornerstones has a proven method for immersing people in the science experience through public libraries, and is scaling up to expand its impact in more communities. Being non-partisan, trusted, and accessible community institutions, public libraries can be dynamic gathering places where people come together to learn how science and technology shape their lives.

Cornerstones of Science is a charitable organization recognized by the IRS as a 501(c)(3). All gifts and donations are tax-deductible to the fullest extent of the law.

Individual donors, corporations and philanthropic organizations help Cornerstones place more scientific tools and experiences in the hands of families. Your generous support will:

- Help public libraries become dynamic community science centers with loanable scientific tools such as telescopes and user-friendly traveling science exhibits
- Make science engaging for diverse audiences by helping Cornerstones' existing 30 library partners and new libraries acquire science books and multi-media resources, and convene thought-provoking conversations between citizens and scientists on vital STEM issues
- Support library staff in their work to forge community science connections by providing ongoing access to scientific resources, training and tools

We value your support. Cornerstones proudly recognizes its sponsors and donors on our website and in written materials (including *Connections*, the Cornerstones of Science Annual Report).

Business leaders tell us that the benefits they receive by sponsoring Cornerstones programs and activities include:

- Creating business opportunities and expanding their client base
- Strengthening brand and reputation by increasing awareness
- Participating in activities that create media coverage and benefit science education
- Offering their employees opportunities to serve as leaders, mentors and volunteers
- Making long-term investments in science and technology that will strengthen the workforce
- Interacting with science, technology, engineering and math leaders



Since founding Cornerstones in 1999, I have vigorously supported its mission to engage public libraries in the vital task of connecting children and adults with science. Nothing that I have accomplished in physics or in industry has been more fulfilling. That fulfillment is reflected in the staff, the Cornerstones Board, and especially the libraries involved. To accomplish all of Cornerstones' ambitious goals, we need the support of people like you. Please join us in becoming a Cornerstones sponsor."

- Lee Grodzins, Cornerstones of Science Founder, MIT Physics Professor Emeritus, inventor, and co-founder of the Union for Concerned Scientists