

A Brief History of the Sciencenter

Ithaca, New York

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BEGINNINGS

Founded in May 1983 as a 501(c)(3) not-for-profit educational organization, the Sciencenter grew out of the hands-on science program run for 15 years by volunteer teachers Debbie Levin and Ilma Levine at several Ithaca City School District elementary schools. For most of those years, the programs were based at Beverly J. Martin School, where Principal Beverly Martin encouraged them to set up a "science discovery room." Debbie and Ilma realized the special value of making science accessible, from an early age, to underserved youth. This philosophy has continued throughout the history of the Sciencenter: it is a common thread woven into the location, mission, and programs of the organization today. In 1982, a number of interested members of the community met at the Tompkins County Public Library and formed the board of directors of the Sciencenter. Many of them are still intimately involved with the Sciencenter, as emeritus board members, advisory board members, volunteers, or supporters.

EARLY OPERATIONS

The first exhibition space opened in 1984 at 200 East Buffalo Street, in space donated by Sciarabba Walker & Co., a local CPA firm. When the space became rented and the Sciencenter had to move, the museum found free space available in the old Hickey's Music Store on South Tioga Street. Volunteers built exhibits, a small museum store was added, and schools were invited to bring classes for hands-on programs. From 1986 to 1989, membership and attendance grew, and the base of volunteers expanded. When the Sciencenter was forced to close its Tioga Street site in 1989 to make way for a new county building, Ithaca Center offered temporary space and the Sciencenter again relocated. In 1990, the Sciencenter closed its exhibit space to focus on the task of building a permanent home.

PLANS FOR A PERMANENT FACILITY

By the fall of 1988, it had become clear the organization would need to find larger and more permanent quarters to remain viable in the long term. Architect and Ithaca resident Bob Leathers, nationally known for his innovative community-built playgrounds, offered his services to help design a structure that would serve as home to the Sciencenter. Leathers proposed the Sciencenter be built by members of the community – including businesspersons, secretaries, store clerks, teachers, bricklayers, electricians, university professors, doctors, grandparents, and children. The result would be a science center that belonged to the entire community.

THE FIRST CAMPAIGN

The campaign began in 1990 with a donation of \$50,000 by Vector Magnetics, Inc., an Ithaca technology firm. In October 1990, the board, under president Bruce Thompson, hired registered professional engineer and geologist, Dr. Charles Trautmann, as Executive Director. The project was announced in February 1991 at a party at Rock Stream Studios on Cherry St., attended by 500 individuals and highlighted by presentations by Mayor Benjamin Nichols, Assemblyman Marty

Luster, State Senator Jim Seward, Congressman Matt McHugh, Cornell President Emeritus Dale Corson, Nobel Laureate Hans Bethe, and Cornell astronomer Carl Sagan. Trautmann and Thompson were able to secure pledges from several donors for \$250,000 to move the project forward. Under their leadership, the Sciencenter board, staff, and volunteers developed refined architectural plans, formulated a business plan, and laid the groundwork for a \$1 million fundraising campaign. The proposed building would be about 5,000 square feet in area and would have an adjacent outdoor science park.

PHASE I CONSTRUCTION

A steering committee, led by Mary Helen Cathles, Sally Grubb, and Charlie Trautmann as General Coordinators, assisted by Kathy Krafft, Barbara Thorp, Brian Corzilius, and others, helped secure donations of materials and cash. Emerson Power Transmission Corporation, Wegmans Food Markets, and other corporations sponsored the project. A \$90,000 demonstration project grant for the heating system was provided by the New York State Electric and Gas Corporation. Many other local businesses assisted with donations of building materials or deep discounts on products and services. Restaurants provided food during the building periods, as did many individuals. Fundraiser Sherri Bergman, anxious to join the challenge of creating a community-built science center, was hired to help with the project. Barbara Thorp, with 17 years of steel construction management experience, was also added to the team to manage operations. The cash portion of the campaign was capped with a \$100,000 grant from the Kresge Foundation. A major commitment to a volunteer-built project was a first for the foundation. Groundbreaking officially took place at a ceremony in August 1992, and construction took place between August 1992 and May 1993, with 2,200 volunteers donating more than 40,000 hours of labor to the project. Key to success was the help of several volunteers who became involved early in the project. Kathy Krafft, a Ph.D. physicist from Cornell, worked tirelessly on exhibit development. She was later hired and is now Traveling Exhibitions Curator. Sue Spitz, a member of the original board, handled membership mailings for more than 2,000 members until 2016. Gladys McConkey, retired editor from Cornell's College of Engineering, edited the quarterly newsletter and annual report for many years. The grand opening for Phase 1 took place on May 22, 1993, only nine months after groundbreaking.

MUSEUM EXPANSION

Exhibit development was rapid and prolific, and by 1995 a number of exhibits were in storage for lack of display space. Demand for programs continued to grow, additional National Science Foundation project grants were in hand, and the staff was twice as large as had been projected in a 1992 pre-construction business plan. To accommodate this growth, the Sciencenter leased an adjacent brick building from the City of Ithaca to provide 2,000 square feet of program space. In 1996, the Ithaca Urban Renewal Agency of the City of Ithaca transferred this building and the other half of the 600 block of First Street to the Sciencenter for \$1. In 1999, the Sciencenter launched a capital campaign to expand the Sciencenter to 32,000 square feet to provide additional exhibit and program space, an early childhood area, and a discovery room. The campaign raised \$5.5 million, and the expansion project was dedicated on February 28, 2003, on the 20th anniversary of the Sciencenter's founding. Galaxy Golf, an 18-hole science-based mini-golf course, was completed in 2004. In 2014, the Sciencenter's mini-golf course was rebuilt by Harris Mini Golf to be fully ADA compliant. In September 2015, the new Sciencenter Mini-Golf opened including a different science-

themed obstacle on each hole. In 2010, the Sciencenter purchased a building at 233 Cherry St., providing much-needed shop and storage space and allowing the museum to stage, house, and maintain a growing portfolio of exhibitions, and building capacity to serve a growing market with innovative and high-quality science exhibitions.

ADVANCEMENT

The museum expansion behind it, the organization could now focus on planning for future educational impact and building systems to support these strategic plans. In 2004, Lara Litchfield-Kimber was hired as Director of Advancement (later becoming the Sciencenter's first Deputy Director) and was charged with creating a team to integrate the areas development, membership, marketing, communications, and public/media relations to advance the mission of the Sciencenter. During the next eight years, she succeeded in growing the annual fund, developing an individual giving program, raising funds for special projects, and growing the Sciencenter endowment. In 2006, the Sciencenter secured a grant from the Park Foundation to integrate front desk and development/membership computer systems and to experiment with targeted marketing strategies to increase attendance. This effort, combined with a redesigned website, online giving and membership purchases/renewals, and revamped communications pieces, helped the Sciencenter better connect with donors, members, guests, members of the media, and the general public.

GUEST RELATIONS AND OPERATIONS

The Sciencenter hosts about 100,000 guests each year, from all 50 states, 60 foreign countries, and six continents. With a strong emphasis on customer service and safety, the Guest Relations and Operations team manages all aspects of daily museum operations, the Sciencenter Store, safety training, and volunteer management. The Sciencenter places a strong emphasis on volunteers, who assist with many aspects of the operation, including serving as museum guides (called "Bluecoats"), member services, exhibit development and maintenance, building and grounds maintenance, and educational program delivery. With the help of volunteers, the Sciencenter organizes free community events each year such as "Free Sundays" in the winter and "Spooky Science" at Halloween.

EDUCATIONAL PROGRAMS

Education has always played the most important role at the Sciencenter. The museum has experimented with many approaches over the years, most of which have related to exhibits, programs, and events, and has quickly adapted to and often taken advantage of changing conditions in the formal and informal educational environments. Over the years, the Sciencenter has created kits to support the elementary science curriculum at schools, delivered outreach programs for in-school and afterschool, provided portable planetarium shows through its StarLab, offered field trips to school classes, provided interactive museum floor programs, and many other educational programs. For more than two decades, a member of the community presents a program at 2 pm on Saturday called "Showtime," in which they share some aspect of their work in science with the public.

In 2009, the Sciencenter adopted a bold new educational vision of a regional community in which "Every young person is empowered to use science in shaping a better future." This vision, anchored

in the concept of youth empowerment through science, is the focal point for all the museum's exhibits, programs, and events. The vision embraces but transcends the traditional "excitement for science" mission of many science centers. The vision includes three initiatives that form a progressive program of developing youth empowerment at the preschool, elementary, and middle school levels. Each initiative takes account of the special developmental needs of children at that stage and takes a difference approach:

- Early Explorers (ages birth to 5) provides exhibits and program for early learners, while placing a high emphasis on working with the parents, early childhood teachers, and day-care providers in children's lives. The focus is on building curiosity and creativity, while playfully introducing science concepts such as cause-and-effect, gravity, flow of water, and air pressure.
- Young Scientists (ages 5 to 11) provides family and school audiences with exhibits, programs, and events with a focus on building confidence and collaboration.
- Future Science Leaders (ages 11 to 14) seeks to keep young people engaged in science during adolescence and puts them into the role of teacher, researcher, technology developer, and developing leader. FSL programs include intensive work as summer camp counselors-in-training, citizen scientists, and museum presenters. The focus is on critical thinking and communicating with impact.

The Sciencenter provides field trips for all 2nd grade students in Tompkins County through our partnership with the Discovery Trail and Kids Discover the Trail!

The Sciencenter is also a leader in national initiatives. Through a National Leadership Grant from the federal Institute for Museum and Library Services, the museum leads a collaborative for early science learning with five partner museums. Through this collaborative, the Sciencenter shares best practices in science professional development for Head Start teachers with a national audience of museum professionals and Head Start educators. The museum is also a leading organization and a hub for the National Informal STEM Education Network (NISE Net).

EXHIBITS

The goal of the Sciencenter's exhibits is to empower guests through direct, open-ended experiences with science, technology, engineering, and math, both indoors and outdoors. Initially built entirely by volunteers, and often inspired by designs from San Francisco's Exploratorium, the Sciencenter's exhibits have evolved into a unique combination of open-ended inquiry, exploration of scientific principles, and interactive experiences with issues or topics such as climate change, health of the oceans, environmental quality, earthquakes, and astronomy. A professional team of exhibit developers has a 4,000-SF shop in the museum's basement and 5,000-SF of additional space at the museum's Cherry St. facility.

Some key current exhibitions include:

- **Science Playground** - an outdoor science playground with dozens of exhibits on motion, sound, water, and light. The main goal is to for children to experience that science is all

around them, to gain confidence that they can do science, and to see that science is often a collaborative process.

- **Sagan Planet Walk** – a model of the Solar System at 1 to 5-billion scale, with the Sun on the downtown Ithaca Commons, the dwarf planet Pluto at the Sciencenter, and the planets to scale in between. The nearest star, Alpha Centauri, is represented by a station in Hawaii. The main goal is to stimulate awe and critical thinking about the scale of the universe and our place within it.
- **Saltonstall Animal Room** – a collection of fish, reptiles, and amphibians from various environmental habitats throughout the world. In 2016, the Sciencenter added a New York Natives Animal Room wing to showcase fish, reptiles, and amphibians found locally in the Finger Lakes region. The main goal is for guests to appreciate the need for maintaining biodiversity in the world and to empower them to preserve natural habitats.
- **Curiosity Corner** – an indoor and outdoor space for children under 4 with opportunities to explore water, air, and many other areas of science. Exhibits focus on early childhood cognition, with attention to the development of gross and fine motor skills, executive function, sensory and tactile experiences, and parental engagement with each child's learning. This space is also used to provide enhanced programming for infants, toddlers, preschoolers, and their caregivers.
- **Brooks Family Foundation Ocean Education Gallery** – a series of exhibits on ocean life and conservation including a live animal Tidepool Touch Tank. The main goal is to stimulate critical thinking about water conservation, the protection of our watershed, and for guests to understand their impact on ocean life.
- **Discovery Space** – a room where children and adults can explore two dozen topics through self-contained activity kits called "Discovery Boxes." The main goal is for children and parents to develop the capacity to discover science together in a setting where parents are coaches and facilitators, rather than teachers.

The Sciencenter has developed a robust traveling exhibitions program that maintains an inventory of 10-12 exhibitions for rent by other museums. Two staff members market, tour, and maintain the exhibitions, which typically reach about 1 million museum guests outside of Ithaca each year.

Much of the exhibits team's efforts are currently focused on the overarching vision of empowerment and directed toward modifying or replacing exhibits to enhance their capacity to empower young people "to use science in shaping a better future" for themselves, their community, and the global world beyond.