

A presentation on energy policy draws an attentive audience to the lecture series at the Denver Museum of Nature & Science. *Photo courtesy DMNS*

Hot Topics: *Planning a Successful Lecture Program*

By Carol Cochran

But because we weren't sure how to reach more of them, we decided in 2002 to hold a series of focus groups composed of adults 60 years old and older.

Our informants gave us a lot of good information. Only a few preferences set them apart from other age groups: They are interested in intergenerational programs; they appreciate promotional copy that is easy to read; and they prefer weekday programs held between 10:00 a.m. and 3:00 p.m. Otherwise, their interests tend to match those of other lifelong learners.

Our focus groups said the identity of the speaker was the

The Denver Museum of Nature & Science (DMNS), in Denver, Colorado, has an ambitious public lecture program for adults. Launched 30 years ago, our lecture series seems to get bigger each year. The 76 events we offered in 2002 were attended by 10,100 people.

Museum personnel offer about 20 percent of the lectures, telling audiences something "new and different" about the work of our organization and offering them insider information. We've had a few big names (Sir Edmund Hillary, Richard Leakey, Jane Goodall)—a risky proposition financially, but so far these programs have worked out well. We've tied lectures to the topics of temporary exhibitions and combined them with IMAX films. Authors on book tours offer challenging ideas. We've put together series on "hot topics"—recent examples include Middle Eastern culture and issues, Colorado's drought, discoveries in space science, and endangered species recovery.

Three years ago, we started tracking

our lecture audiences, distributing feedback surveys at every event. From these, we know that most of our attendees (85 percent) are museum members. (We are fortunate that DMNS has a large membership to draw from.) Lecture goers fit the profile of the average member—only more so. Ninety percent are Anglo-Americans; 61 percent are female; 30 percent have a bachelor's degree; and a full 50 percent list postgraduate work or an advanced degree. They are a loyal group; 40 percent have attended five or more of our programs within two years. And 75 percent indicate that they are older than 55. (This, too, mimics general museum membership, since 21 percent of DMNS members identify themselves as "over 60.")

Of course, we knew that a large portion of our audience consisted of older adults, even before our statistics told us so. And we knew that this segment of the general population was growing, was well-educated, had leisure time, and was therefore a good potential audience for our programs.

most important factor in both promoting the program and ensuring its success. Any topic was good, especially if it offered something new and different. A question/answer period was important to them. (These attendees want to be actively involved in some way.) They were not interested in programs for "seniors only," especially when the emphasis was on gerontological topics, and they enjoyed being part of a diverse audience. ("That's why we don't go to senior centers," they told us.)

Based on what we learned, we began offering daytime lecture programming in addition to evening talks. Our daytime audience is a little older and enjoys lighter fare than our evening audience. ("Curators' Favorites" book discussions have been popular, as have programs like "Geology of the World" or "Birds of the Denver Area.") Sometimes we schedule the same talk in both daytime and evening slots. We have tried a few intergenerational programs, with mixed success. But mostly we have continued doing what

we were doing all along, only with greater confidence.

Because DMNS focuses on several core disciplines, a varied lecture menu fits the institution's mission. We find it easy and rewarding to offer something "new and different" to our inquisitive and thirsty lifelong learners. ■

Carol Cochran is manager of Lifelong Learning at the Denver Museum of Nature & Science, Denver, Colorado. For more information, visit www.dmns.org/programs/discover.htm.

Doing "Real Science"

One of the most popular adult education offerings at DMNS is the Paleontology Certification Program.

Launched in 1990 as a way to "professionalize the amateur," it consists of a sequence of courses for participants aged 17 and up that, when completed, qualify the students to help museum researchers with field or lab work. Classes are taught by DMNS Earth Sciences staff and research associates.

In this situation, everyone wins. The museum gets highly trained volunteers, and adults with a passion for paleontology can fulfill their dream of doing "real science" by completing 10 courses rather than a Ph.D. Participants may pursue basic certification or go for specialization in field methods or fossil preparation.

To date, almost 900 people have been involved in the palaeontology program, and 179 have received certificates. Program graduates work in our lab every day and help DMNS curators in the field each summer. Their accomplishments include co-authoring published papers, discovering new dinosaur sites, describing and naming a species of sauropod, and—as the "DMNS Fossil Posse"—investigating more than 70 dig sites in the Denver area.

The Paleontology program has been so successful that DMNS recently started an Anthropology Certification Program. Space Science certification is in the wings. All offer both personal enrichment and the chance for significant volunteer work.

—C.C.

Starstruck: Lifelong Learning and the Carnegie Science Center

By John G. Radzilowicz

Carnegie Science Center (CSC) is a community-focused institution that sees itself as a vital part of Pittsburgh and the surrounding area. Staff actively seek partnerships with local organizations to extend the museum's reach and increase its regional impact. For these reasons, I was definitely interested when one of Pittsburgh's major educational institutions, Carnegie Mellon University (CMU), contacted me in 2000 about a possible collaboration.

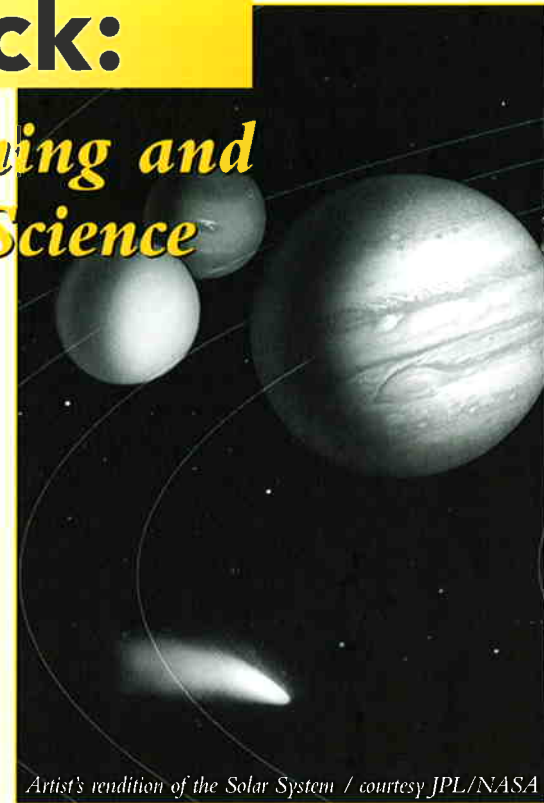
CMU's Academy for Lifelong Learning, known as ALL, is one of many outreach programs run by the university. ALL is targeted at people in their senior years who wish to stay intellectually active by taking a variety of college-level survey courses. (Technically, there is no age requirement, although, as one student put it to me, "those in the 50–60 age bracket are considered the youngsters in the program.") I was asked to prepare and teach a course in introductory astronomy, and I agreed.

In the three years that I've been offering the course, the classes have always been at capacity. As any teacher knows, there are few things more energizing than a group that is eager to learn what you have to teach. That is exactly the situation with ALL, and, as I've learned firsthand, it's quite a group. Most of my students are retired from careers as successful professionals, often in engineering or the sciences, though many other fields are represented. Whatever their backgrounds, they all tend to share an intense interest in astronomy—an interest that they

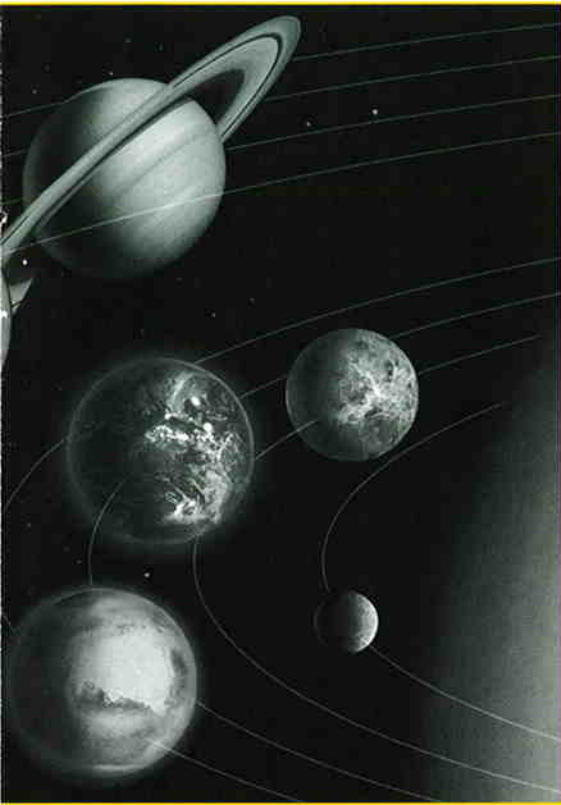
just never got around to satisfying.

That's where I come in. My "Introduction to Observational Astronomy" course focuses on how to become a backyard stargazer. We explore the constellations, the Moon and planets, and all the basics needed to truly enjoy the wonders of the sky. I also take time to delve into the ways that observations of the sky have informed our current understanding of the cosmos. I strive to create a lively and challenging experience.

As enjoyable as my ALL experience has been, it is not without its challenges. Because of the needs of this age group, classes are held on the CMU campus during daylight hours. Most instructors like this arrangement, but as an astronomer, I'm not so happy. Staying on campus limits my ability to use the Buhl Planetarium & Observatory at CSC, one of the most powerful tools I have for teaching, and the restriction to daylight hours precludes taking students out under the stars, something I try to do whenever possible. I always offer a "field trip" to the Planetarium & Observatory on an evening at the end of regularly scheduled classes, and it is



Artist's rendition of the Solar System / courtesy JPL/NASA



very popular. But the limitations require me to be that much more creative in the classroom.

Money is not a motivator in this arrangement. ALL charges its students only a nominal membership fee, and CSC receives no financial compensation. For us, the relationship is about mission and access to an important segment of the community. I sometimes run into ALL students at special CSC events or astronomy-related programs, and more than a few stop by my office when they visit the science center. Although we have not formally documented numbers, some of my students have become members and/or donors following the class.

CSC's mission—like that of many science centers—includes developing science literacy and participation in our region. We also seek to meet the needs of our diverse community. CMU's ALL program fits that model well. ■

John G. Radzilowicz is director of the Henry Buhl Jr. Planetarium & Observatory at the Carnegie Science Center, Pittsburgh, Pennsylvania. For more information on Carnegie Mellon's Academy for Lifelong Learning, visit www.cmu.edu/all.

Lifelong Learners: A Global Phenomenon

The Academy for Lifelong Learning (ALL) at Carnegie Mellon University is not an isolated program. ALL is one of nearly 300 affiliates of the **Elderhostel Institute Network (EIN)**, a 15-year-old North American association of volunteer-run, community-based programs for adult learners.

The typical EIN affiliate—known as a Lifelong Learning Institute (LLI), or perhaps an Institute of Learning in Retirement (ILR)—operates on a local college or university campus, with classes scheduled weekly or biweekly on a semester basis. The institution donates its classroom space, and the members volunteer to handle organizational duties (scheduling, curriculum development, and administration) and often much of the teaching. Classes also are taught by college faculty or outside experts. Some LLIs require members to be 50 years old to join; others have no formal age requirement. Fees are kept low, and anyone may participate, regardless of education level.

The first LLI in the United States, New York City's Institute for Retired Professionals, was founded in 1962 under the auspices of the New School for Social Research. In 1988 two dozen LLIs partnered with Elderhostel Inc.—a nonprofit organization that offers short courses and travel programs for adults aged 55 and up—to form the EIN. Today, EIN members serve more than 60,000 lifelong learners a year in the United States, Canada, and Mexico.

A similar organization, **University of the Third Age (U3A)** was launched in France in the summer of 1972, when the University of Toulouse made its facilities and staff available for the educational enhancement of local retirees. (The term “third age” refers to the progression from childhood and working adulthood to the retirement years, when people are presumably freer to pursue new interests.) The U3A concept has spread around the globe, with affiliates of the French-based Association Internationale de Universités du Troisième Age (AIUTA) now active in Europe, Asia, and North, South, and Central America. Some U3A study groups are sponsored by a college or university; others, notably in the United Kingdom, are autonomous or connected with some other type of educational entity.

Both EIN and AIUTA maintain central offices that provide supporting materials, operate communications networks for members, and help to organize regional, national, and international meetings.

Individual countries also support lifelong learning through a variety of programs. In November 1999, the U.N. General Assembly adopted a resolution recognizing the importance of learning throughout life. Included was authorization for an **International Adult Learners' Week**. The UNESCO site listed below has links to Adult Learning Week programs in more than 35 countries.—*Carolyn Sutterfield*

■ **Elderhostel Institute Network (EIN):**

www.elderhostel.org/ein/intro.asp

■ **Association Internationale de Universités du Troisième Age (AIUTA):** www.aiuta.asso.fr

■ **International Adult Learners' Week:**

www.unesco.org/education/uie/InternationalALW/

Sharing 'Secrets': Creating Exhibition Content for Adults

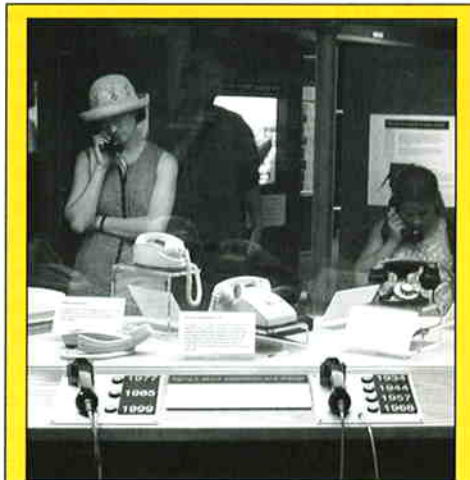
By Christine Reich

In 1998, the Museum of Science, Boston, in collaboration with the Science Museum Exhibit Collaborative, set out to create a traveling exhibition on a common human experience—the process of aging. Funding for the project was provided by the National Science Foundation.

The challenge was to appeal to both family and adult audiences through exhibits and programs that combined current research in biology and social science with perspectives gained from personal experience. To ensure relevance for older visitors, we held adult focus groups during the formative process and made changes based on their recommendations.

One discussion led to the addition of a new interactive component—a Phone Bank containing examples of telephones from throughout the 20th century—to highlight the changes a centenarian would have experienced during his or her lifetime. To improve accessibility for all visitors, we incorporated design elements like ample seating, clear organizational structure, high light levels, and large font labels.

Our 7,000-square-foot exhibition, *Secrets of Aging*, premiered in Boston in April 2000 (see “The Power of Universal Design,” *ASTC Dimensions*, July/August 2000). Results from the summative evaluation demonstrate a positive visitor response. The average amount of time spent in the gallery was 27 minutes—10 minutes longer than the average time spent by visitors in previous Museum of Science traveling exhibitions. During remedial evaluation, one adult visitor (male, age 50–59) was observed spending more



Suggested by a focus group of older visitors, the Phone Bank became one of *Secrets of Aging's* most popular exhibits.

Photo courtesy Museum of Science

than 2½ hours in the exhibition, watching videos, exploring interactives, and reading text panels.

In exit interviews, many adult visitors—whether attending with a family group, alone, or with another adult—responded favorably to their experiences. They thought the exhibition provided “interesting information” and reported that they enjoyed its “hands-on” nature. The following comments are typical:

“[I] liked how [it] was geared toward everyone, adults and children...” (male, age 30–39). “The first time I’ve seen an exhibit like this, and it is excellent...” (female, age 50–59). “A person without ‘Bio 101’ could understand it. They made it simple for us simple people...” (male, age 50–59). “The exhibition handled it very well, a sensitive subject...” (female, age 40–49).

Interviewees also mentioned ways the exhibition could have been improved. The most frequent sugges-

tion was for better organization or layout (“Sometimes I didn’t quite know where I was going”). This echoed concerns raised by older visitors during the front-end study. Although other interviewees also remarked, unprompted, that the exhibition was well organized, the persistence of the complaint demonstrates that this is an area the Museum of Science should revisit when creating future adult-oriented experiences.

Other comments suggest that some visitors found the size of the exhibition intimidating. When creating exhibitions intended for adults, the temptation may be to think that older visitors want an “in-depth” learning experience. Results from the *Secrets of Aging* summative evaluation show that even for adults there is such a thing as providing too much information:

“There is so much in there ... [it’s] pretty overwhelming...” (female, age 20–29) “I probably didn’t read everything I should have.... I could tell you better if I had spent more time....” (male, age 40–49). “[I rated the exhibit ‘OK’] only because I couldn’t see everything...” (female, age 40–49).

In post-visit interviews, both adults and children related what they saw in the exhibition to themselves and their own experiences. One young visitor (male, age 10–15) said he had expected the exhibition to be “about old people,” but found that it was “about everybody.” A 40- to 49-year-old male visitor commented that he “liked learning stuff about my body.” Another male, age 30–39, related an exhibit on calcium and bone strength to himself and his children: “Growing up, I drank

a lot of milk. I wonder if my boys are getting enough....”

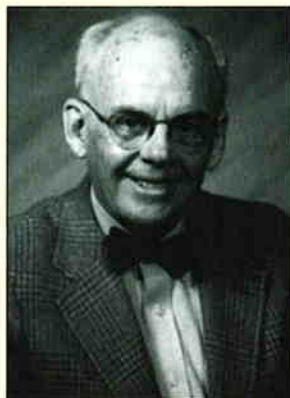
The Phone Bank suggested by our focus group turned out to be one of the most successful exhibition components. During tracking and timing studies, more than 50 percent of visitors stopped there; average dwell time was over 2 minutes. The exhibit was also frequently cited in interviews as a favorite component. A comment from one visitor (male, age 60–69) may reveal why people found it so engaging: “The [telephones station] was interesting. I’ve seen and used all of them. I remember riding on Grandfather’s hay wagon. My current hobby is assembling and playing with computers. That represents a lot of change.”

Other adult visitors felt that *Secrets of Aging* affected not just their knowledge about biological aging, but also their personal perspective about the process: “The exhibition is very affirming.... It is a lot about *not* feeling different...” (female, age 50–59). “One message I found in the exhibit is hope. Getting older is not necessarily falling apart physically and intellectually...” (male, age 40–49).

At the same time, some adult visitors surveyed said they thought the exhibition was “for kids.” This perception suggests that the balance of content may not have been correct, and that we still need to find a way to create learning experiences that say to adults, “This is for you.”

For the Museum of Science, *Secrets of Aging* was an experiment, a test to see if it was possible to create an exhibition for both family audiences and adult audiences. Summative evaluation suggests that, with some exceptions, the experiment was a success.

Christine Reich is an exhibit planner at the Museum of Science, Boston. To learn more about Secrets of Aging, visit its web site at www.secretsofaging.org. For tour information, contact Jan Crocker, jcrocker@mos.org.



Vision Iowa chairman Michael Gartner (left), a former Pulitzer Prize-winning newspaper editor, and University of Minnesota researcher Catherine Verfaillie, an expert on stem cells, will be the keynoters for ASTC 2003. Photos courtesy Vision Iowa and UM Stem Cell Institute

Keynoters Set for ASTC 2003

Two keynote speakers will bring their expertise to the 2003 ASTC Annual Conference in St. Paul, Minnesota. The theme of the conference, to be hosted November 8–11 by the Science Museum of Minnesota, is “Building a Learning Organization.”

On Saturday, delegates will hear from Michael Gartner, chairman of Vision Iowa, a \$225 million state program created to assist in funding major attractions throughout Iowa. A former page-one editor of the *Wall Street Journal*, general news executive of Gannett Co. and *USA Today*, and president of NBC News, Gartner won the Pulitzer Prize for editorial writing in 1997. He is also principal owner of the Iowa Cubs minor-league baseball team and a trustee of the Newseum, in Washington, D.C. In his ASTC talk, Gartner will meld his media, business, and professional sports perspectives to show why an organization must continually be engaged in learning to remain relevant to the people it serves.

Sunday’s keynoter is Catherine Verfaillie, professor of medicine and director of the Stem Cell Institute at the University of Minnesota. Dr. Verfaillie, whose research focuses on

the potential of stem cells to improve human and animal health, was named one of the top 10 innovators for 2001 by *U.S. News & World Report*. At ASTC, she will address why it is critical for science museums to embrace complex and sometimes controversial science as part of their missions—and why more scientists need to be actively promoting public understanding of research.

For more information on ASTC 2003, visit www.astc.org/conference.

Math Momentum-Builders Meet

What do investigations of soil, urban traffic patterns, adult lung capacity, and the mathematics performance of eighth graders have in common? They all utilize data, of course. And they all helped to fuel mathematical thinking among the 40 science center professionals who participated in the first Alpha Institute of *Mathematics Momentum in Science Centers*.

The March 16–18, 2003, event, hosted by the Lawrence Hall of Science (LHS) at the University of California–Berkeley, was the kick-off for the three-year, NSF-funded professional development initiative (see ASTC Notes, *ASTC Dimensions*, March/April 2003).

Calendar

JULY

15–19 Visitor Studies Association Conference.

Columbus, Ohio. *Details:* www.visitorstudies.org/conferen.htm

18–19 ASTC RAP Session.*

“What Makes a ‘Good’ Outdoor Experience at a Science Center?” Science Museum of Virginia, Richmond.

AUGUST

14–15 ASTC RAP Session.*

“Increasing Parental Involvement in Your Youth Program.” New Jersey State Aquarium, Camden, New Jersey.

23–30 National Astronomy Week (U.K.) “The Year of Mars.” *Details:* www.astronomyweek.org.uk/**28–31 Science Center Academy.**

Hosted by Technopolis, Mechelen, Belgium. *Details:* academy@technopolis.be

SEPTEMBER

19–20 ASTC RAP Session.*

“New Approaches to Planetariums—Thinking Outside the Dome.” St. Louis, Science Center, St. Louis, Missouri.

20–24 GSTA International Conference & Trade Show. Glasgow, Scotland.

Details: www.giantscreentheater.com

OCTOBER

3–4 ASTC RAP Session.*

“Partnering for Successful Field Trips.” Louisville Science Center, Louisville, Kentucky.

19–25 National Chemistry Week (U.S.) “Earth’s Atmosphere and Beyond!”

Details: www.chemistry.org/

NOVEMBER

8–11 ASTC Annual Conference.

“Building a Learning Organization.” Hosted by the Science Museum of Minnesota, St. Paul. *Details:* www.astc.org/conference/

27–29 2003 ECSITE Annual Conference.

“Sharing Ideas, Developing Skills, Building Networks.” Hosted by the Deutsches Museum, Munich, Germany. *Details:* www.ecsite.net

DECEMBER

5–7 ASTC RAP Session.*

“Science Exhibits for the Youngest Visitor.” St. Louis Science Center, St. Louis, Missouri.

*Details on all 2003 ASTC RAP sessions are available at www.astc.org/profdev/rapdetail_2003.htm. For updated events listings, click on “Calendar” at www.astc.org.

Attending were staff teams from each of the 13 alpha-site science centers, including representatives from exhibits, education, youth programs, and administration, as well as co-principal investigators DeAnna Beane, of ASTC, and Jan Mokros, of TERC, the Cambridge, Massachusetts-based educational research and development organization.

New LHS director Elizabeth Stage welcomed the group and reminded them that science centers need math-

ematics to fulfill their science goals. The good performance by U.S. fourth graders on the 1995 TIMSS test in science, she said, could be attributed to the many informal learning opportunities in science that young children now enjoy. Stage challenged science centers to provide similar approaches in mathematics.

The content focus of this first of three planned annual institutes was “Data Collection and Interpretation,” but an equity theme, “Opportunities

to Learn Mathematics,” was also a central focus. Day one began with Startling Statements, an interactive tool developed by LHS to spark educator/parent discussions of equity issues in math and science. Teams found that current data often did not support their perceptions of opportunity and achievement in mathematics—particularly with respect to low-income students, girls, and Hispanic/Latino and African-American students. Each team received mathematics performance data, disaggregated by race/ethnicity and grade level, for its own state.

On day two, participants, having read David Hawkins’ essay “I, Thou, It,” viewed and discussed a video of teenagers engaged in data collection and analysis at a science center. Advisor George Hein noted how the teens challenged each other and took intellectual risks as they interacted with the exhibits. Listening to kids as they interact with materials, Hein said, can provide adults with valuable diagnostic information.

The final morning found the teams gathered in the University of California Botanical Garden with staff from the garden and LHS. In small groups, they tested activities from LHS’s new *Math in the Garden* publication (sampling evidence of plant predators, examining and classifying components of garden soil, and graphing the attributes of flower petal patterns) and generated new ideas for integrating mathematics into their own science programs.

Throughout the workshop, daily small-group and team discussions enabled teams to clarify concepts, identify challenges, discover new resources, brainstorm, and work closely with TERC staff to plan their next steps. All 13 alpha sites have committed to making mathematics more explicit and accessible in at least one exhibit or program. During the three-year project, each team will also work with ASTC and TERC to plan and host a one-day math-

related workshop for other science centers, museums, and community partners in their region.

Representatives from *Mathematics Momentum* teams will reconvene this November at the ASTC Annual Conference in St. Paul. Mindful of Elizabeth Stage's observation that science centers need math to fulfill their missions, they will continue to seek ways to build support for a mathematics community in the field.

For more information, contact DeAnna Banks Beane, 202/783-7200 x137, e-mail dbbeane@astc.org, or Jan Mokros, TERC, 617/547-0430, e-mail jan_mokros@terc.edu.

Science Centers to Aid Development

In November 2002, representatives from 11 of the 40 member countries of the Centre for Science & Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre) met in Kolkata, India. The occasion was a three-day workshop on "The Role of Science Centres in Development Strategies," hosted by India's National Council of Science Museums (NCSM). Nations represented included Colombia, Egypt, India, Iraq, Malaysia, Mauritius, Nepal, Sri Lanka, South Africa, Vietnam, and Zambia.

Nohora Elizabeth Hoyos, general director of Colombia's Maloka science center, reports that three main agreements emerged from the workshop:

- The NAM S&T Centre will begin reporting on informal science education activities in its quarterly newsletter and on its web site, www.namstet.org.

- Members established three networking zones, each with a "focal point" contact. Hoyos will serve in this capacity for Latin America. For

Asia, the contact is Mismah Bte Jimbun, science officer of Malaysia's National Science Centre; for Africa and the Middle East, it is M.H.F. Mungo, director of Zambia's National Science Centre.

- One regional workshop will be held in alternate years from the biennial general workshop. Hoyos and Maloka will host the first gathering in Bogota in late November 2003.

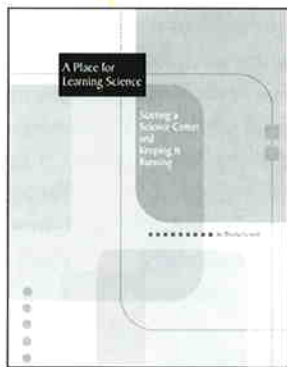
A Classic Updated

The newest book from ASTC Publications, *A Place for Learning Science: Starting a Science Center and Keeping It Running*, by Sheila Grinell, is aimed at newcomers and veterans alike. The author, a former leader of ASTC's Institutes for New Science Centers and current president/CEO of the Arizona Science Center, Phoenix, has had 30 years' experience with start-ups.

In this 130-page, expanded and updated version of her 1992 *A New Place for Learning Science*, Grinell presents the essentials of science center planning and management in five sections: Starting with the Mission, Under-

standing the Audience, Planning Exhibits and Programs, Setting Up the Business, and Preparing for Change. Accompanying each chapter are "Voices from the Field," sidebars that reflect the experiences of museum practitioners, and "Viewpoints," longer articles by leading analysts within and outside the field. Detailed chapter notes and an extensive bibliography complete the book.

A Place for Learning Science is priced at \$30 for ASTC members; \$35 for nonmembers (add \$6 for shipping in the United States). To order, contact ASTC Publications at 202/783-7200 x140; e-mail pubs@astc.org. ■



Grants & Awards

IMLS Grants Announced

On April 29, 2003, the Institute of Museum and Library Services, Washington, D.C., announced more than \$3.9 million in grants to 351 U.S. museums for programs to help conserve collections and improve operations. A total of 20 ASTC members received awards, as follows:

Conservation Project Support:

- **Coyote Point Museum for Environmental Education**, San Mateo, California (\$50,000)
- **Denver Museum of Nature and Science**, Denver, Colorado (\$41,093)
- **Bishop Museum**, Honolulu, Hawaii (\$36,075)
- **Chicago Zoological Society (Brookfield Zoo)**, Brookfield, Illinois (\$63,267)
- **Field Museum**, Chicago, Illinois (\$46,544)
- **Putnam Museum of History and Natural Science**, Davenport, Iowa (\$17,375)
- **Henry Ford Museum and Greenfield Village**, Dearborn, Michigan (\$50,000)
- **Cape Fear Museum**, Wilmington, North Carolina (\$15,816)
- **Schiele Museum of Natural History and Lynn Planetarium**, Gastonia, North Carolina (\$49,233)
- **Academy of Natural Sciences**, Philadelphia, Pennsylvania (\$49,788)
- **Milwaukee Public Museum**, Milwaukee, Wisconsin (\$47,480)

Conservation Assessment Program:

- **Palo Alto Junior Museum and Zoo**, Palo Alto, California (\$7,730)
- **Gillespie Museum of Minerals**, DeLand, Florida (\$7,890)
- **Hook's Discovery & Learning Center**, Indianapolis, Indiana (\$7,730)

Museum Assessment Program:

- *Institutional Assessment*: **Brevard Museum of History & Science**, Cocoa, Florida, and **The Children's Museum of Memphis**, Memphis, Tennessee (\$1,775 each)
- *Collections Management*: **Museum of Science**, Boston, and **The National Watch & Clock Museum**, Columbia, Pennsylvania (\$1,775 each)
- *Public Dimension*: **The Brooklyn Children's Museum**, Brooklyn, New York, and **Heard Natural Science Museum & Wildlife Sanctuary**, McKinney, Texas (\$2,970 each)