

Rising to the Challenge: *Public Health in Latin American Science Centers*

By Alejandra León-Castellá

Public health and agricultural extension programs have preceded the science center movement by centuries with efforts to improve practices, keep the population healthier, and increase yields.

In contrast to their efforts—mainly focused on practical elements instead of the science behind them—the science popularization programs in Latin America have come to work on enhancing the knowledge base within the general population. These programs engage the public with critical issues (such as HIV/AIDS), show the multidisciplinary array of connections that surround a single subject (such as water), improve access for people with different disabilities and comprehension levels, communicate through networking and multimedia, and propose creative ways to enable discussion and the exchange of ideas.

The Latin American Network for the Popularization of Science and

Technology—widely known as RedPop (www.redpop.org)—was established in 1990 in Rio de Janeiro, Brazil, with the support of UNESCO's Science, Technology, and Society Program. RedPop is different from other regional science center networks in that it comprises not only science centers and museums, but also informal education and science communication programs in the region. RedPop is a multilingual network that spans from Mexico to the tip of South America, including the Caribbean, with some associate members outside this region. In 2008, RedPop had members in 11 countries. RedPop supports its members through an e-bulletin (www.cientec.or.cr/mhonarc/redpop/doc/index.shtml), a biannual meeting (www.xireunionredpop.com), research groups, and small courses. These networking opportunities allow members to communicate about a variety of issues, including social issues like public health.

Health challenges in Latin America—as in other parts of the world—are concentrated in poor, overpopulated areas and consequently degraded environments. Respiratory ailments affect some countries severely, and cardiovascular disease, obesity, and malnutrition affect certain regions. Balanced nutrition and healthy sexuality are common issues in urban settings, while dengue, yellow fever, and malaria persist in tropical regions. Some recurring illnesses like pertussis (whooping cough) and tuberculosis require more research and new treatments. The photographs and stories on these two pages illustrate how science centers and museums across Latin America are working to address these and other health challenges.

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To commemorate World Population Day 2008, Museo de Ciencia y Tecnología in Guatemala City (www.funtec-guatemala.org) joined efforts with the National Planning Office (SEGEPLAN) in organizing a month of educational activities, lectures, workshops, and age-appropriate discussion groups for ages 5 to adult. Themes included world population and overpopulation, gender equity, family planning, reproductive responsibilities and rights, biology, and HIV/AIDS. In the picture at right, children are listening to a lecture about population. The



Photo courtesy Julian Amorin

museum also sought to raise awareness on the subject with an exhibition of 48 photographs by well-known national and international photographers. The exhibition also included 14 posters with images and personal stories from around the world. A 90-page book on the subject and diverse handouts were printed and distributed to visitors. More than 3,000 students visited the exhibition. The project was sponsored by the United Nations Educational Program.

—*Alcira García-Vassaux,*
executive director



Photo courtesy El Museo de los Niños de Caracas

Five years ago, El Museo de los Niños de Caracas in Venezuela (www.maravillosarealidad.com) opened the exhibition *La emoción de vivir... sin drogas* (*The excitement of living... without drugs*). Visitors cycle through seven rooms to learn about how drugs have been used by humanity from ancient times to the present, the different types of drugs, and the social consequences of drug use and drug trafficking. In the above picture, a guide teaches a group of children about the effects of different types of drugs, including amphetamines, alcohol, and inhalants, on the human body. Although the exhibition does not seek to make a value judgment with respect to the use of these substances, it has been of great help to parents and educators who want to help children understand this social problem.

—José Ángel Andrade, administration

Microscopes (below) are one of the tools for engaging the public in



Photo courtesy Gutemberg Brito/IOC

health issues at Museu da Vida, Rio de Janeiro, Brazil (www.museudavida.fiocruz.br). Seeing the “invisible” world is the starting point for discussing how social and environmental factors can impact the quality of life. Museu da Vida aims to inform and educate about health, science, and technology in a creative and entertaining manner, through permanent exhibits, interactive activities, multimedia, theater, video, and labs. The objective is to help the population understand scientific breakthroughs and their impact on daily life, expanding their participation in issues related to health, science, and technology. The museum is connected to the Oswaldo Cruz Foundation, a key Latin American health and biomedicine research institute.

—Luisa Massarani, head of science communication studies



Photo courtesy Espacio Ciencia

Respira Uruguay (*Uruguay Breathes*, http://latu21.latu.org.uy/espacio_ciencia/en/), an interactive exhibition (above) produced by Espacio Ciencia of the Technological Laboratory of Uruguay in Montevideo, aims to raise awareness about the risks of smoking by comparing the lives of smokers and non-smokers with respect to tobacco's impact on finances, physical appearance, and overall

health. The exhibition is designed for the general public, but specifically targets children from ages 9 to 15, a stage at which Uruguayan youth may start to experiment with cigarettes. The exhibition was unveiled in August 2007 by Tabaré Vázquez, the president of Uruguay, and Margaret Chan, the director-general of the World Health Organization.

—Martha Cambre, executive coordinator

El Museo de la Ciencia y el Juego of the National University of Colombia in Bogotá (www.unal.edu.co) designed and produced a health fair to engage audiences of all ages in play and interactive activities to prevent disease and promote health. It was presented in collaboration with Unisalud, a firm that provides health services for employees of the university. The fair promoted healthy lifestyles through 16 modules focused around the themes of breast cancer prevention, alcoholism, oral health, and growth and development. In the picture below, a visitor tests her balance, illustrating the theme of growth and development. Our reflexes and balance change as we grow, and specialists measure them to determine if children are developing well. ■

—Maria Cristina Ruiz, general coordination of education and communication



Photo courtesy El Museo de la Ciencia y el Juego, National University of Colombia