EYH Mission Statement

The Expanding Your Horizons Network (formerly The Math/Science Network) is a non-profit organization composed of educators, scientists, mathematicians, parents, students, community leaders, and government and corporate representatives. Our mission is to encourage young women to pursue science, technology, engineering and mathematics (STEM) careers. Through Expanding Your Horizons (EYH) Network programs, we provide STEM role models and hands-on activities for middle and high school girls. Our ultimate goal is to motivate young women to become innovative and creative thinkers ready to meet 21st Century challenges.

EYH History

'74 Σ — Founded by an informal group of women scientists and educators who were concerned about the low numbers of women participating in math and engineering undergraduate courses.

'76 π — The first Expanding Your Horizons conference was held at Mills College

'78 ÷ — The Carnegie Corporation awarded the EYH Network a two-year grant to establish a formal organization. The EYH Network began to initiate technical assistance to those who wished to institute Network programs.

'80 ∞ — EYH Network established the Math/Science Resource Center to provide information and assistance.

'82 ≠ — EYH Network became an independent non-profit organization

'06 ∴ — Seagate Corporation chose the EYH Network as one of 5 national $100,000 non-profit organization grant recipients

An interview with Dave Wickersham:

Seagate Technology's President and Chief Operating Officer, Dave Wickersham, joined the Expanding Your Horizons Board of Directors in the fall of 2005. Having worked with EYH for several months now, Dave shares his perspective and reasons for supporting an organization focused on helping young women stay interested in science.

How did you get involved with the Expanding Your Horizons Network?

Last summer, Seagate's CEO, Bill Watkins, challenged his executive team to find an area within the community where we could become more involved as a company and make an impact. Having a college-age daughter and a wife who helped initiate a family math and family science program for elementary school kids, I know about the social and academic challenges young girls face in the fields of science, technology, engineering and math (STEM).

I also wanted to learn more about why many young girls lose interest and stop pursuing studies in these areas—specifically in the middle-school grades.

The Expanding Your Horizons Network is focused on inspiring young women through hands-on workshops and conferences and providing positive role models in these fields. They are making important strides in this area and through Seagate's and my involvement, I believe we are helping break down some of the barriers and lingering stereotypes that might dissuade girls from following their natural interests in STEM subject areas.

Why is it important to encourage young women to enter STEM fields?

Some recent figures I read stated that only 21 percent of scientists and 11 percent of engineers in the U.S. are women. Interestingly enough, a 2001 study showed that 66 percent of girls liked science in the fourth grade—so what is happening between ages 10 and 25? Clearly, girls are interested and can excel in science, but for some reason they don't continue studying in these fields. As corporate executives, I believe it is our responsibility to support and enable young women interested in science to continue to follow their interests and have an equal opportunity to create satisfying careers in STEM areas.

Being the chief operating officer of a global technology company, I know first-

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hand the challenges we face in recruiting top talent, specifically women and minorities. There is enormous opportunity for women in the STEM career fields and if through our partnership with EYH we can help women better position themselves for success and career growth, then we have achieved something valuable and sustainable.

As a key executive at Seagate, what do you do and what does your company do to support women in science?

At Seagate, we understand the value diversity brings to a company. We benefit greatly from the creative energy and dialogue generated from a conference room or lab filled with unique perspectives versus a quiet consensus from a group of like-minded people.

It is critical to our success to maintain and build a diverse employee population. Bringing more women into key decision-making roles within the company is a big focus for my organization and for Seagate, and I work closely with our human resources department to be sure we are recruiting and retaining top female talent.

Recently at Seagate, in conjunction with Women's History Month, we honored our own women in technology and invited several female employees from different organizations and backgrounds to share their career stories with other employees. These discussions were well attended by both women and men.

Through my partnership and board involvement with EYH, I have also tried to increase the visibility and awareness of the organization's efforts to further build the pipeline of future women scientists and engineers. Within my organization, more than 25 employees are working together on hands-on science workshops targeted at young girls for the conferences and are anxious to learn about more ways to get involved. By next March, we hope to bring Seagate-sponsored EYH conferences to Minnesota, Colorado and possibly into Asia.

Do you have any advice for young women considering pursuing a career or further studies in these areas?

Yes—go for it! Pursue your interests and don't let any preconceived ideas of who or what a scientist or engineer might look or be like influence your decisions. Find a mentor that will help you, too. And, of course, attend—or help start—an EYH conference in your area so you can interact with other young women with similar interests and passions.

The world of science is fascinating and if it interests you, don't allow anything, or anyone, to stop you from following your dreams.

Workshop helps expand horizons for middle school girls: NASA astronaut Magnus to speak (The Houston Chronicle, February 10, 2005)

The Willoughby sisters can't get enough of the Expanding Your Horizons in Science and Mathematcis annual workshop.

Sope (pronounced Sho-pay), a senior at DeBakey High School for Health Professions, will be volunteering at the program after participating throughout middle school. Mayowa, a seventh grader at the Rice School, will also be attending this year. "I liked being able to see professional women doing something I wanted to do when I grew up," said Sope. Best of all, she added, "No one picks anything for you. The program is tailored to each girl. If you don't want to do medicine, they have engineers and astronauts. It's awesome."

The conference, sponsored by the American Association of University Women, helps expose middle school girls to careers involving math and science. They get the chance to meet and interact with women who are active in math-and-science related careers. This year's keynote speaker is NASA astronaut Sandra H. Magnus. "She's the ultimate expanded horizons gal," said Priscilla List, conference chair.

Magnus flew in space on the shuttle Atlantis in 2002. She holds a bachelors degree in physics and a doctorate in engineering.

The conference will take place Feb. 26, beginning at 8 a.m. at the Rice School/ La Escuela Rice. The program is limited to the first 600 participants, and the program always fills, said List. There are separate workshops for teachers and parents who accompany the girls.

This year, the program focuses on the health professions, including a physical therapist and a biomedical researcher; the business side of mathematics; the sciences of engineering, meteorology, and architecture; and women involved with marine biology and wildlife rehabilitation. Parents and teachers can learn about eating disorders, academic anxiety, communication techniques for teens, and methods to incite classroom interest in the sciences and technology.

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Sope Willoughby said the program showed her that her dream of medical school is not impossible. "The women who gave their time to speak inspired me. These were professional women doing their thing and being successful." They showed Willoughby that she could do it, too.

Willoughby's favorite EYH presentation came in eighth grade, when she heard an emergency room physician speak about her first day in the emergency room. She saw a patient with bedsores, Willoughby recalled, and maggots were spilling out of the wound. But the doctor was able to treat the patient, and Willoughby went away awed by the doctor's ability to truly help her patient, despite the huge ick factor.

Julie Thrall, a junior at Spring Woods High School, is another three-year veteran who's returning for her second year as a volunteer.

"I didn't know there were so many different careers in math and science," she said. EYH showed her that food chemistry will play a big role in her future in the culinary arts.

Study finds U.S. bias against women in science: Discrepancies not linked to productivity, significance of work (Reuters, Sept 18, 2006)

WASHINGTON Women are being filtered out of high-level science, math and engineering jobs in the United States, and there is no good reason for it, according to a National Academies report released on Monday.

A committee of experts looked at all the possible excuses—biological differences in ability, hormonal influences, childrearing demands, and even differences in ambition—and found no good explanation for why women are being locked out.

"Compared with men, women faculty members are generally paid less and promoted more slowly, receive fewer honors, and hold fewer leadership positions," the Academies said in a statement.

"These discrepancies do not appear to be based on productivity, the significance of their work, or any other performance measures."

Female minorities fare the worst, the study found. And the expert panel said the discrepancies are costing the country many talented leaders and researchers and recommended immediate and far-reaching changes to change the balance.

"We found no significant biological differences between men and women in science, engineering and mathematics that could account for the lower representation of women in academic faculty and scientific leadership positions," said Donna Shalala, president of the University of Miami and head of the committee that wrote the report.

The study was compiled by all the National Academies—the National Academy of Sciences, National Academy of Engineering, and the Institute of Medicine—which advise Congress, the federal government, and various institutions.

"It is not a lack of talent but an unintended bias ... that is locking women out," Shalala, a former secretary of the U.S. Department of Health and Human Services, told a briefing.

"Fundamental changes in the culture and opportunities at America's research universities are urgently needed."

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Everyone is biased

"A substantial body of evidence establishes that most people—men and women—hold implicit biases," the report reads.

And it noted that the problem is not restricted to academia, or even to science.

"The underrepresentation of women and minorities in science and engineering faculties stems from a number of issues that are firmly rooted in our society's traditions and culture," the report reads.

Many arguments have been made to explain why women do not excel in math and science—that they are not as good as men in mathematical ability, that female brain structures are different or that hormones affect performance.

Lawrence Summers resigned as Harvard University president after he made widely disparaged remarks in 2005 suggesting that women were biologically less able in math and science, and that women chose to pay more attention to their families and thus failed to put in enough effort to succeed at work.

The experts looked at many different studies on the issue.

"The committee found no sound evidence to support these myths and often good evidence to the contrary," said Ana Mari Cauce, Executive Vice Provost at the University of Washington in Seattle.

"In fact, female performance in high school mathematics now matches that of males. If biology were the basis of that, we've seen some major evolution in the past decades."

Urgent change is needed, said Cauce, if the United States wants to compete internationally in science.

"This is about more excellence. This is not about changing the bar or lowering the bar," Cauce said.

Trustees, university presidents and provosts need to make it clear from the top down that recruiting and promoting women is a priority, the report said.