WHY THE SCIENCE CENTER?

Over the past 15 years, research\(^1\) has shown the unique role that informal science institutions (ISIs) like Science Centers, Zoos, Aquariums, and other museums can play in the promotion of girls and women in STEM. ISIs provide a low-stakes (non-evaluative) environment filled with opportunities to experiment and take on different roles, which can be difficult for females and non-dominant cultural communities in the traditional formal education environment, where they might have self-identified as not competent or interested in science.

Pacific Science Center embraces its role as the place where people go to enjoy high-impact informal science education that ignites curiosity in every child. In order to live up to the promise of our mission, to serve our entire community, we have a commitment to enabling access for all as one of our guiding principles. In order to fulfill the promise of this guiding principle, we also address the social and cultural barriers that deter girls from entering STEM professions and inhibit women from thriving in them.

Museums and science centers are in a position to support girls as individuals – and to address some of the larger mediating factors that, if not intentionally addressed, work against the best interests of girls and of science. Research indicates that it is not simply liking science or being good at science that correlates with incorporating it into a girl’s life or pursuing a STEM career. A girl needs to have a sense that science is important, that it matters, that women do it, and that she wants it to be a part of her life.

\(^{1}\) Girls, Equity and STEM in Informal Learning Setting: A Review of Literature October 2013 and Closing the STEM Gap: Why STEM classes and careers still lack girls and what we can do about it.

GIRLS AND WOMEN IN STEM

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“\textit{In STEM fields and the innovation economy, there just are not enough women serving as leaders. As a prominent science education institution, it is critical that PacSci nurture and provide women and girls with rich experiences and growth opportunities. Our board is committed to equitable representation at all levels of the organization. In all we do, PacSci is breaking down barriers for Girls and Women in STEM.}”

—Adriane Brown, Chair, Board of Directors
GIRLS-ONLY PROGRAMMING
Research shows that for girls, it is especially important to align scientific content with their desire to be creative and have an impact on the world. Girl-only programs like the ones you can support at PacSci are essential for creating learning environments that foster space for exploration outside of traditional gender norms.

“I like how you can design everything and just do it all yourself. I like it because they’re all girls and they have similar interests.” — Girls-Only Camp participant

VISIBILITY OF ROLE MODELS
Girls and young women who know a woman in a STEM profession are substantially more likely to feel empowered when they engage in STEM activities. This relationship encourages their belief in a woman’s ability to succeed in math and science. At PacSci there are female STEM role models, both in staff and guest scientists, on our floors every day.

“My daughter is more comfortable doing science in a girls-only environment. She is quieter and will hang back and let more outgoing children give all the answers most of the time. A girls-only environment helps her come out of her shell more easily to learn and participate.” — Girls-Only Camp Parent

PROMOTING ACHIEVEMENT OF WOMEN
Women have been a part of STEM industries for decades, but their successes are often not attributed to them. This masking of female achievements in STEM has reinforced the long standing assumption that women are not good at science and math. We heighten awareness of successful women in STEM through PacSci programs and communications.

TEEN PROGRAMS WITH A COMMITMENT TO EQUITY
Aside from girls-only programming, co-ed programming is important for normalizing female aptitude and success in STEM for their male peers. This normalization is critical to create STEM career paths where women are welcomed. At PacSci, donor funded internships and programs encourage boundary breaking post-secondary plans for the female participants.

“My favorite part about being a Maker-in-Residence is my interactions with guests. I love hearing about the connections people make when they’re introduced to what I’m building, or to the 3D printer for the first time. Girls, your ideas and contributions are valuable. Do not be afraid to create your own experiments even if you’re not sure where it will lead you, or even if you fail for the first or fifth time.” — Kathy Summers,

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