


# Women in Science Make Connections

BY MARY ADAM THOMAS

**A**fter Fran Solomon completed an undergraduate degree in biology with a minor in chemistry, she wanted to continue on to graduate school where she would pursue a Ph.D. and become a research scientist. But it was the late 1960s and she was told by professors and family members that women didn't do that. It would take too long, nobody would hire her, no man would marry her, and her personal life would be miserable, they said. So she shifted gears and obtained a master's in library science.

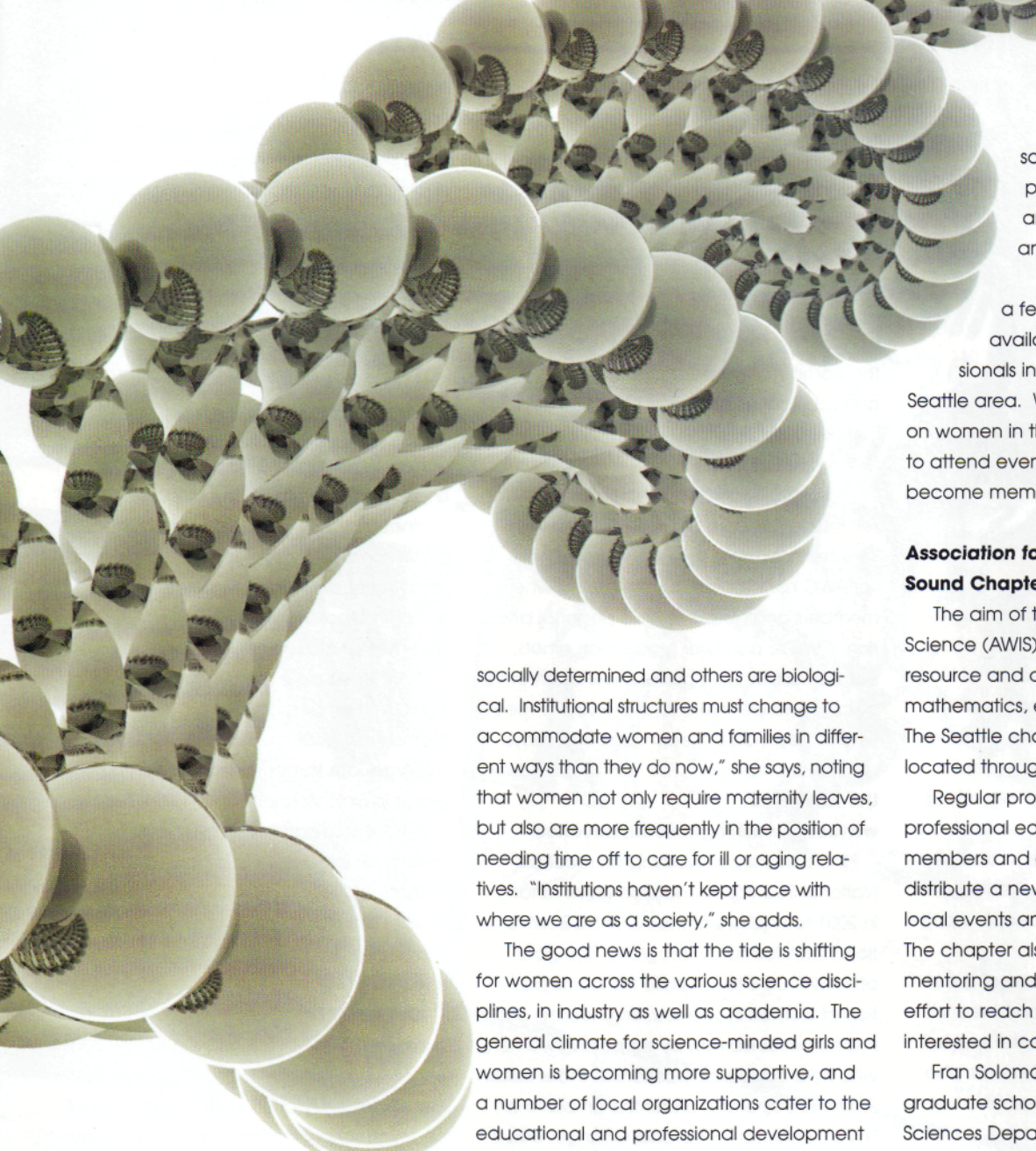
But the dream refused to die. After conducting literature searches on behalf of scientists at university libraries at Brandeis and Harvard, she decided she wanted to be one of the scientists doing the research. So she came to Seattle and returned to school, earning a master's degree in environmental biology and a Ph.D. in fishery sciences at the University of Washington.



Dr. Fran Solomon is now a senior ecologist at the King County Water and Land Resources Division in Seattle and a visiting professor at the University of British Columbia. In 1984, she helped establish the Seattle chapter of the Association for Women in Science (AWIS), and has remained active in the local and national branches of the association ever since.

"I realized after a few years of working as a librarian that if I had been given a full range of options, library science was not what I would have chosen," Solomon says. "Even though more women are going into the science fields, girls are still hearing these





says. "Organizations that support girls and women in science are here to instill confidence and leadership skills in females."

Following is information on just a few of the many organizations available to students and professionals in the sciences throughout the Seattle area. While all of the groups focus on women in the field, men are welcome to attend events and are encouraged to become members.

**Association for Women in Science, Puget Sound Chapter — [www.seattleawis.org](http://www.seattleawis.org)**

The aim of the Association for Women in Science (AWIS) is to provide "a network, a resource and a voice" for women in science, mathematics, engineering and technology. The Seattle chapter is one of more than 20 located throughout the country.

Regular programs offer networking and professional education opportunities for members and guests, and chapter leaders distribute a newsletter with information on local events and pertinent association news. The chapter also participates in a robust mentoring and scholarship program in an effort to reach out to girls and young women interested in careers in science.

Fran Solomon recalls that when she was in graduate school in the UW Aquatic & Fishery Sciences Department, it was extremely helpful to know that AWIS existed. "Receiving the national AWIS newsletter gave me a good connection and let me know that there were other women out there pursuing science careers," she says.

**Association for Women in Environmental Professions — [www.awep.org](http://www.awep.org)**

The roster of the Association for Women in Environmental Professions (AWEP) includes attorneys, government employees, academicians, consultants and others. All members are united by their common interest and involvement in environmental education.

AWEP's events combine education and networking. While most event speakers cover environmental issues, broader subjects such as stress management and career coaching are occasionally addressed. In addition,

socially determined and others are biological. Institutional structures must change to accommodate women and families in different ways than they do now," she says, noting that women not only require maternity leaves, but also are more frequently in the position of needing time off to care for ill or aging relatives. "Institutions haven't kept pace with where we are as a society," she adds.

The good news is that the tide is shifting for women across the various science disciplines, in industry as well as academia. The general climate for science-minded girls and women is becoming more supportive, and a number of local organizations cater to the educational and professional development of women in all branches of science.

The key, according to those in the know, is mentorship. Soon after Libby Colasurdo graduated from the biology program at the University of Puget Sound, she signed up for the AWIS mentoring program. She was matched with AWIS's then-president, a Ph.D. at UW who met several times with Colasurdo to discuss her career goals and urged her to stay in the sciences. Colasurdo, now a research lab manager at the VA Medical Center, is the current president of the local AWIS chapter and mentors other young women science students.

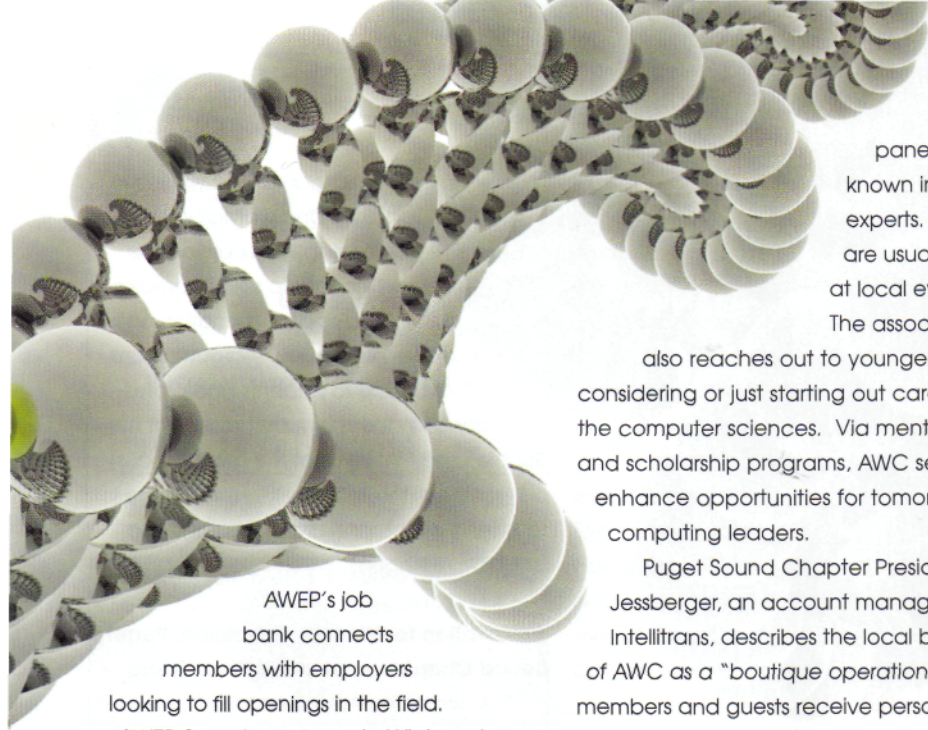
"When I was just starting out, my mentor encouraged me to stay in the field, and it was so great to see that somebody else understood the issues faced by young people — especially females — in science," she

stupid messages that they can't do science."

Julia Parrish, Ph.D., an associate professor with joint positions in the UW School of Aquatic and Fishery Sciences and the Biology Department, sees more females enrolling in science at both the undergraduate and graduate levels. She attributes this to a changing social dynamic, the effects of Title IX (a law that bans discrimination on the basis of sex from publicly funded educational programs), focused efforts to encourage girls in school, and simple cost-of-living realities that drive women toward professional careers.

But Parrish also sees a need for academic institutions to make basic changes to better serve the needs of women who choose academic careers in the sciences. "Women make fundamental life choices, some of which are





**AWEP's job  
bank connects  
members with employers**

looking to fill openings in the field.

AWEP Secretary Manuela Winter, who does environmental work on behalf of King County, is a 10-year member of the association. In her opinion, given the extremely competitive nature of the environmental professions in the Seattle area, networking is the best way to find the right professional match. "The competition here is too steep for just a resume to stand out when you've got anywhere from 50 to 300 people applying for a job," she says.

According to Winter, the draw of the Northwest's natural beauty, combined with the region's unique environmental issues, attracts an abundance of individuals who want to take advantage of the personal and professional opportunities here.

**Association for Women in Computing  
Puget Sound Chapter — [www.awcps.org](http://www.awcps.org)**

The Puget Sound chapter of the Association for Women in Computing (AWC) is one of 15 regional branches within a well-established and growing national organization. The 40+ local members, along with approximately 120 non-members who stay informed via email announcements, represent all facets of information technology.

The AWC works actively to support women throughout the computing industry, advancing professional education, promoting awareness, providing networking opportunities and offering career advancement. Monthly meetings cover a variety of topics related to the field, and often feature

panels of well-known industry experts. Recruiters are usually present at local events.

The association

also reaches out to younger women considering or just starting out careers in the computer sciences. Via mentoring and scholarship programs, AWC seeks to enhance opportunities for tomorrow's computing leaders.

Puget Sound Chapter President Amy Jessberger, an account manager with Intellitrans, describes the local branch of AWC as a "boutique operation," where members and guests receive personal attention. "We're a smaller group than others, but that allows us to get to know each other better. And we make sure everybody meets whom they should meet," Jessberger says.

**UW ADVANCE**

**[www.engr.washington.edu/advance](http://www.engr.washington.edu/advance)**

The University of Washington received National Science Foundation grant funds in 2001 to implement the ADVANCE institutional transformation program. The goal of ADVANCE is to increase the participation of women in science, engineering and mathematics careers by supporting women who hold academic positions in those fields. ADVANCE operates under the umbrella of UW's Center for Institutional Change, and is open to male and female participants.

While other programs are designed to support students in the sciences and/or enhance the *teaching skills* of academicians, ADVANCE is one of the few programs whose initiatives support the leadership and professional development challenges faced by women at the faculty level. The philosophy here is that if each faculty member is properly mentored and given the necessary resources to achieve her full potential, the environment improves for all citizens of the university community.

Joyce Yen, a former assistant professor in industrial engineering at UW who now serves as program and research manager for ADVANCE, says that the program supports faculty with the many things they do outside of their core science and engineering research

and instruction. "They're well supported in those areas, but they might not know how to do things that help them better manage their scientific enterprises and their faculty careers," says Yen. "We've filled a gap."

**Women in Science and Engineering**

**[www.engr.washington.edu/wise](http://www.engr.washington.edu/wise)**

Women in Science and Engineering (WiSE) is a resource for girls and women interested in pursuing careers in the sciences. Housed in the Engineering Advising and Diversity Center at the UW College of Engineering, WiSE provides educational and professional support in an effort to increase recruitment and retention of women, and to establish a positive environment for women and men at all academic levels.

WiSE offers peer and professional mentoring, and members often serve as mentors themselves. WiSE member Tessa Francis, a UW graduate student in the doctoral programs in Biology and the School of Aquatic and Fishery Sciences, has served as a mentor on behalf of the organization. She recently led middle school-aged students on tours of the campus science center, which allowed boys and girls alike to see female scientists at work.

Between its mentoring and speaker programs, WiSE reaches a number of key audiences, says Francis. "When WiSE hosts special events, they often invite middle school and high school students, as well as graduate students and professionals. This creates a chain of women at all different stages of their scientific pursuits," she says.

**Association for Women Geoscientists**

**Puget Sound Chapter — [www.awg-ps.org](http://www.awg-ps.org)**

When the Association for Women Geoscientists (AWG) held its annual meeting in Seattle a few years ago, promotional materials reminded prospective attendees that this area has it all: active faults, earthquakes, a dormant volcano and a landslide. Members of the Puget Sound chapter of the AWG already know all about the qualities that make our region especially attractive to those interested in earth science.

As one of two Washington-based AWG chapters (with a sister chapter located in Spokane), the AWG-PS serves women in the



geosciences through education and professional advancement. Suzanne Dudziak, vice president of the Puget Sound chapter and principal of Greylock Consulting LLC, says that an interest in the health of Puget Sound attracts environmental scientists of all specialties to this area. She describes the AWG-PS as "comfortable and supportive" in a predominantly male professional environment.

The AWG-PS also sponsors a scholarship program, issuing an annual award to an undergraduate woman who declares her intention to pursue a career in the geosciences. In addition, the chapter is active in regional and state science fairs.

#### **Society for Women Engineers, Pacific Northwest Section — [www.swe-pnw.org](http://www.swe-pnw.org)**

The Society for Women Engineers (SWE) is an international organization that exists to promote engineering as a worthy career for women, and to empower women in the field. The Seattle-based Pacific Northwest (PNW) section is one of the chapters housed within the society's northwest region, and hosts regular events for professional education and networking.

Both nationally and locally, SWE participates in extensive student outreach programs, from grade school through college, in an effort to tap girls and women interested in math and science careers. The PNW section recently chartered a job shadow program, in which college students spend at least one day on site with a working engineer to gain a clearer understanding of a given engineering specialty. The section also participates in mentoring programs through the national organization.

According to Section President Missy Brost, an engineering manager at Boeing, the professional climate for women engineers is improving. "There have definitely been some challenges in the past, but it's slowly getting better. The Pacific Northwest has quite a technical workforce, given the presence of Boeing, the computer companies and the naval bases, and we'd like to see more women getting engineering and technical degrees," she says. ■

*Mary Adam Thomas is a freelance writer from Bainbridge Island.*

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