Typically, an AWIS member pursued education and training embedded in an academic institution before launching a professional STEM career at a university, a government agency, a science or technology company, or a non-profit institution, or some combination of these entities. As a result, many of us are employed by organizations that provide a certain level of structure and support. This is true even in my own case of working in a four-person office. When asked, we might not immediately think of describing ourselves as “entrepreneurial” since the term usually describes risk-takers willing to go for broke to bring a nub of an idea to fruition. Unfortunately the statistics on women-owned businesses support the notion that STEM women do not see themselves as entrepreneurs; fewer women than men start STEM-based businesses. This reticence is not characteristic, however, of our sisters in other sectors of the economy where women create half of all businesses. Why the difference? Needless to say the answers are complicated.

Most women-owned businesses are small, often single proprietor and generally less than five employees. These small businesses, particularly in the services economy, have low startup costs launched with self-funding or supported loans from family or close associates. Women, and particularly women of color, are less likely than men to secure bank funding or venture funding. My suspicion is that it is more difficult to launch a STEM-based business without sufficient capital and without the network required to secure such capital. There may be other things contributing to the lack of STEM-women entrepreneurs. Data suggests that women apply for fewer patents then men (although recent data says that women are narrowing the gap) and are not taking their science to market, even in the life sciences where women represent a large percentage of the workforce. Although speculation often turns to intrinsic characterization of women such as “the confidence gap,” some intriguing data suggests part of the answer might derive from an issue with which AWIS members, thanks to the AWARDS project, are familiar: implicit bias.

Writing in the New York Times online January 9, 2012, Jonathan J. Li reported on a study completed by Scott Shane, professor of economics and entrepreneurship at Case Western Reserve University.

“Academic women who want to commercialize their inventions may face a hidden bias when attempting to patent and license their discoveries. That is the finding of a recent study in which dummy applications were randomly assigned male or female names and then sent to technology licensing officers at 88 top research universities in the United States.

While previous research has shown that female academics commercialize their discoveries less than their male counterparts, receiving half as many patents, it has focused on other factors, such as women’s underrepresentation in senior research positions, or career and lifestyle choices.

This study, however, is the first to show another reason: biases on the part of technology licensing officers, who were found to be less likely to recommend identical proposals for patenting and commercialization.”

If you have a tech transfer officer at your institution you might want to pass on the details of this study and let them know that AWIS has successful tools for confronting and eliminating implicit gender bias.

In response to some of the statistics summarized above, and a recognition that our economy needs fresh ideas for businesses and employment, a report from the US Small Business Administration’s Summit on Women Entrepreneurs identified items women business owners said could empower women to consider launching a new business, including:

- Increasing access to capital
- Providing mentoring
- Enhancing networking opportunities
- Lowering barriers by providing access to information - on paperwork, tax credits, regulations

Reading the report it seemed obvious to me that, when it
President’s Remarks

comes to STEM-based businesses AWIS is again well positioned to be an important asset for women considering taking the entrepreneurial plunge. AWIS webinars, policy seminars, and networking opportunities are all valuable benefits of your AWIS membership. The SBA report is available online as a pdf file at http://www.sba.gov/sites/default/files/Women%20Entrepreneurs%20Summit%20Series%20FINAL.pdf

Finally, I would like to challenge all AWIS members to consider unleashing your inner entrepreneur regardless of whether you have any interest in launching your own business or not. I suspect we can each benefit from becoming a bit more entrepreneurial regardless of our positions. What do I mean by this? I mean we can all benefit from increasing the flexibility, adaptability, and nimbleness with which we approach our daily schedules. We can maintain our focus on the bottom line (what are we achieving) versus distracting “make work.” Many women start their own businesses because they want greater control over their own lives and because they want to create a work-environment consistent with their own values. If you value substance over show, respectfulness over belittling, and collaboration over competition think about how you can influence your workplace by treating it like it was your own business. How could you make your workplace more energetic, more meaningfully productive while at the same time more supportive of success? AWIS is a fantastic platform for sharing ideas and examples that can change our workplaces for the better.

A decade ago, in an AWIS Magazine column (available online via http://www.jsmf.org/about/s/Successfully%20Creating%20Your%20Own%20Business.pdf) I wrote about three women who had started science-based companies. Their advice is as timely now as it was then. I am particularly taken with the way women entrepreneurs find the things no one has thought about doing or look around to see what is being done and ask how they can do it better. They see opportunities where others see only challenges. So, do you have an idea? Go ahead, take the plunge—but don’t forget to take AWIS with you!

Jaya Bhatnagar, Ph.D. has post-doc experience from the National Cancer Institute, NIH. She has been a member of AWIS, San Diego Chapter since January 2012. She is currently a scientist at Takeda Pharmaceuticals, San Diego, CA.

Vania Cao is a Ph.D. candidate in Neuroscience in the Graduate Partnerships Program at the National Institutes of Health with Brown University. She is investigating how animal behavior affects brain activity over experience and is using in vivo imaging and recording techniques to probe neural circuit dynamics in awake behaving mice. She recently joined AWIS as a student member.

Piper J. Klemm is currently a Ph.D. Candidate in Inorganic Chemistry at University of California, Berkeley. She owns her own business managing and marketing show pony hunters.

Heather Luckarift is a Research Scientist for Universal Technology Corporation in Dayton, OH and has been based at the U.S. Air Force Research Laboratory since 2002. Her current research focuses on the development of biological fuel cells that generate electrical power directly from the environment. She holds a Bachelor of Science in Process Biotechnology from the University of Teesside (UK) and a Doctorate in Biological Sciences from the University of Warwick (UK). She has been a member of AWIS since 2008. Outside of the laboratory, she enjoys the ‘Florida’ life and competes in triathlons. Contact her at heather.luckarift ctr.gb @us.af.mil

Melissa McCartney is an Editorial Fellow at Science Magazine where she works on several science education initiatives. She holds a B.S. in Biochemistry from the State University of New York at Binghamton, and a Ph.D. in Neuroscience from The George Washington University. She completed a postdoctoral research position at The Children’s Hospital of Philadelphia and has been a member of AWIS since 2008.

Ranjani Prabhakara earned her Ph.D. in Microbiology and Immunology from the University of Maryland, Baltimore in 2009, where she studied immune responses to Staphylococcus aureus biofilm infections. She then took a position at the FDA Center for Biologics Evaluation and Research as a Staff Fellow in the Office of Vaccine Research and Review. At the FDA, she performs a combination of scientific research on vaccines and immune responses bacterial infections, and review of regulatory submissions pertaining to S. aureus vaccines.

Jennifer K. Wind, M.A., has been a member of AWIS since 2008. Jen was a contributing editor to the AWIS Magazine from 2008-2010 and has served as Features Editor for the AWIS Magazine since 2010. She works full-time at Dana-Farber Cancer Institute and is a part-time degree candidate at Harvard. In her free time, Jen enjoys reading New York Times bestsellers, tutoring high school students, and spending time with loved ones over coffee or wine. Contact Jen at awis.magazine.features@gmail.com.