



NEWSLETTER

Mission Statement: The Association for Women in Science, Inc. (AWIS) is a non-profit organization dedicated to the achievement of equity and full participation of women in all areas of science and technology.

LETTER FROM THE PRESIDENT



Dear Fellow AWIS-SD Members & Friends,

Happy Spring to you! What better way to “Spring” into the next decade of professional opportunity than to attend AWIS-SD’s 2011 Women in Science and Technology (WIST) Conference at the Salk Institute on May 14th? WIST is a daylong conference focused on career and personal development. The WIST Committee has organized a fantastic program titled “Embrace Change: Opportunities in the New Decade” that includes inspirational keynote speakers, workshops, roundtable discussions, speed networking sessions, and the presentation of our 2011 Scholarship Awardees. I first joined AWIS-SD in 2001 after attending this wonderful conference! Read more about the WIST activities and speakers at www.wist2011.org and register by the deadline, May 7th. If you are not yet a member, you can join AWIS-SD while registering. In addition to WIST, you might want to attend the June 6th Strategy Session titled “Develop Financial Acumen.”

The Events Committee is planning a fun, family-friendly event for summer time – stay tuned! Of course, the monthly Coffee Club meetings are ongoing. If you haven’t attended one yet, I encourage you to try one that suits your interests.

The past couple of months have been full of AWIS fun. For example, our Outreach volunteers have been busy with their involvement in the Greater San Diego Science and Engineering Fair, the Science Festival Expo, and the Exploring Your Horizons Conference. I was one of the ~30 AWIS-SD judges at the Science Fair – it was wonderful to talk with the next generation of women scientists! AWIS-SD members and friends also enjoyed an interesting and tasty behind-the-scenes tour of the Stone Brewery. Remember that we have lots of volunteering, networking, and leadership opportunities with our AWIS-SD Committees. If you are interested, you can read more about the activities and opportunities organized by our eight Committees on the AWIS-SD website (www.awissd.org) under “Get Involved.”

Are you considering some management training? The UCSD Rady School of Management is offering a 15% course registration fee discount for AWIS-SD members. Please email me at

president@awissd.org if you are interested in this opportunity or have any questions, comments or suggestions about/for our chapter.

Hope to see you at the WIST Conference!

Most sincerely,
Dody
 Dorothy (Dody) Sears

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REGISTER NOW - WIST 2011!



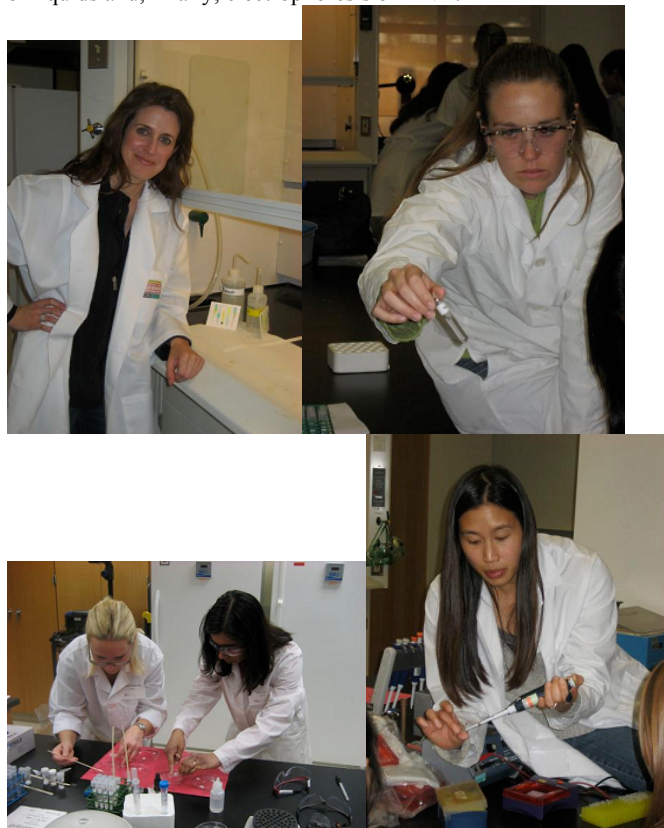
The 10th biennial Women in Science and Technology (WIST) Conference will be held on Saturday, May 14th at the Salk Institute for Biological Sciences. This year’s conference entitled, “Embrace Change: Opportunities in the New Decade,” will promote networking for scientists at all levels, introduce women to career opportunities in science, and showcase positive role models and achievements of women scientists. Workshops will focus on career and personal development, as well as networking opportunities. Keynote speakers include Margaret “Peggy” L. Johnson, Executive Vice President of the Americas and India for Qualcomm, and Cynthia “C.J.” Warner, President and Chairman of Sapphire Energy. For more information and registration, please visit: www.wist2011.org

AWIS-SD Outreach Workshop for the Expanding Your Horizons Conference 2011

By April Cresse

The Outreach Committee of AWIS-SD assembled a workshop for girls at the Expanding Your Horizons (EYH) conference on March 5, 2011 at the University of San Diego. EYH is a national organization with the goal of promoting science and engineering to girls in grades six through 10. AWIS-SD has participated in the San Diego EYH conference by conducting workshops since 2006. EYH is a distinct organization from AWIS; however, one of the program co-chairs for this year's EYH conference, Alexis (Ally) Pasulka, is also a member of our AWIS-SD Outreach Committee. Ally did a terrific job planning, recruiting presenters, and organizing this great event full of hands-on science for girls.

Our outreach workshop was a crime scene event, entitled "Crime Scene Sleuths." We had three sessions, which allowed 45 girls to participate in the AWIS-SD workshop. Our crime scenario involved an imaginary kidnapping of a panda from our San Diego Zoo. The scenario described evidence collected at the crime scene. The girls' objective was to analyze the evidence and identify the culprit. AWIS-SD Outreach Committee members and volunteer scientists assisted the girls at four separate stations to explore chromatography, chemical reactions on powders, physical properties of liquids and, finally, electrophoresis of DNA.



Crime Scene Sleuth workshop scientists: Clockwise from the top: Holly Wilson; Samantha Stout; Juliana Bordowitz and Hima Joshi; Suzanne Lee

(Photos by April Cresse)

The AWIS-SD scientists encouraged hands-on experimentation and gently guided the girls in their quest. The experiments were

designed to identify the unknown liquid, powders, and ink from the crime scene. Also, experiments were performed to match the suspects' DNA with DNA from hair left at the scene of the crime. In groups of three or four, the girls collected and analyzed the data at each station, and with each new bit of information, the case of the kidnapped panda became clearer. Each group successfully identified the panda kidnapper.

The girls had fun participating in this workshop. Some comments we heard during the workshop were "This is really cool," and "Is this really DNA?" We reminded the girls that the activities they performed in the workshop were similar to what scientists do. The girls asked specific questions, made careful observations, analyzed data and formed conclusions. They also learned that real women scientists are approachable and easy to talk to. I was grateful to have worked with five inspiring women scientists who believe in making science come alive for the younger generation and enjoy sharing their enthusiasm for the field. These scientists are Hima Joshi, Juliana Bordowitz, Samantha Stout, Suzanne Lee, and Holly Wilson. The workshop team put great effort into this event and, as a result, it was very enjoyable and well received.

Photos of the workshop will be posted on the EYH website: <http://www.eyhsandiego.org/>

AWIS-SD member profile: Kristen Espantman

By Christine Shulse

AWIS-SD member Kristen Espantman became interested in science at an early age. She has fond childhood memories of her pharmacist father explaining how amino acids make up proteins. Her interest in science grew as she continued her education and discovered that she had a talent for biology, chemistry, and math. "I found I was always most interested in learning how Earth, life, and the universe work," Kristen explains.

Kristen continued to follow her passion at UCLA's Henry Samueli School of Engineering and Applied Science, where she earned a B.S. in chemical engineering. As part of her coursework, she immersed herself in all branches of science, including math, physics, chemistry, and biology. Her favorite class was thermodynamics because it integrated math, physics, and chemistry to describe phenomena that occur around us every day. At UCLA she learned that she loved the laboratory, especially biology.

After college, she took a position as an Associate at Amgen's headquarters in Thousand Oaks, where she worked in Process Development. Her project was to optimize media for the growth of mammalian cells. Kristen really enjoyed the work but found that, as a chemical engineer, she did not have the biology background to understand the science in the depth she desired. She realized that she would have to go back to school full time, but wanted to stay in Southern California to be close to her family in Glendora. After interviewing at several schools in the area, Kristen chose UCSD for its stellar Graduate Program in Biological Sciences.

Currently, Kristen is a Ph.D. candidate in Clodagh O'Shea's laboratory at the Salk Institute. The O'Shea lab is engineering an adenovirus, which would normally cause no more than the common cold, to instead specifically kill cancer cells. Kristen's work on this project has resulted in authorship on a paper in the journal *Nature*. For her dissertation, she is studying the function of viral proteins in

order to have a better understanding of exactly what the virus is doing in the cell. In addition to helping Kristen make great leaps in her understanding of biological phenomena, graduate school has also stimulated personal growth that will serve her well throughout her career. “Grad school teaches you to deal with pressure, be organized, and think thoroughly about the next step in anything you do,” Kristen summarizes.

Kristen’s involvement in AWIS-SD stretches back to her first year of graduate school. She joined in 2006 and immediately began contributing to the chapter as a member of the Events Committee. The first event she organized was a very successful tour of the Birch Aquarium for AWIS-SD members and their families. However, Kristen soon realized that graduate school leaves very little free time and chose to step down from the Events Committee. She did not become an active AWIS-SD member again until 2010, when she joined the Corporate Sponsorship Committee. Kristen sees the Corporate Sponsorship Committee as an opportunity to truly help AWIS, as well as a great opportunity to improve her networking skills. Although Kristen is naturally an outgoing person, she still finds it difficult to get up the courage to meet people and ask them for sponsorship. She views this experience as practice for when she has her own organization to run.

Aside from AWIS, Kristen contributes substantially to the UCSD Biological Sciences Graduate Program. She has been heavily involved in recruiting new graduate students, serving on the Recruitment Committee during her first year. As a second year student, Kristen co-chaired this committee. Additionally, she represented the biology graduate students as the fourth year graduate student representative. In this position she organized a variety of events, most notably the Alumni-Grad Networking Dinner. This event connected current biology graduate students with alumni in the San Diego area, including postdoctoral scholars, professors, and scientists at local biotechnology companies.

When Kristen is not in the laboratory or taking on extracurricular leadership roles, she enjoys attending alternative or indie rock concerts. She also describes herself as a “reality TV junkie.” These days, wedding planning takes up much of Kristen’s free time. She is engaged to a graduate student in the Department of Mathematics at UCSD and they will be married in September of this year. We wish her well as she takes the next steps in both her personal and professional life!

Tour of Stone Brewery

By Monica Brown

The Stone Brewing World Bistro and Gardens in Escondido has become iconic in the world of craft beers. The brewery takes up 55,000 square feet, where the brewers design, test, perfect, produce, and bottle the distinctive beers for which Stone Brewing is famous. The bistro serves unique, flavorful foods that are primarily local and organic. The exquisite beer garden is a pleasant, peaceful acre of greenery, water, and places to sit and enjoy beer and food.

About 25 AWIS-SD members and guests were taken on a private tour of the brewery, where our engaging, entertaining and knowledgeable tour guide walked us through the entire process of beer making, from malting, milling, mashing, fermenting, conditioning, and filtering to bottling.



Bottling machinery

(Photo by Anita Iyer)

Beers can be divided into ales and lagers, and the difference starts with the type of yeast used. Stone brews ales, which are brewed from yeast that collect at the top of the fermentation tank and ferment at 60-72 degrees Fahrenheit. Lagers are brewed at much cooler temperatures, around 46 to 55 degrees Fahrenheit, from yeast that collects near the bottom of the tank (something our guide asked us to keep in mind the next time we see an advertisement for “frost brewed”—the lager yeast actually doesn’t grow any other way). The two styles produce very different beers: ales that can be rich, heavy, and complex, and lagers that are light and clear. The potential diversity offered by ales is how Stone has made its mark as a brewing company.

The differences in brewing can be traced back to the conditions in which the techniques were developed. Ales came from the British Isles, where the water can be quite harsh, and a stronger flavored beer was needed to overcome the mineral taste of the water. By contrast, in Holland and Germany, the low mineral content of the water allowed for a much more delicate, lighter beer. Stone uses proprietary yeast that is carefully genetically monitored and maintained for consistency.

The beer is brewed in one of many fermentation tanks, each of which holds 11,000 gallons of beer. Each tank narrows to a funnel at the bottom, which is capped by a valve that can be opened when the beer is ready to be bottled. The valves were recently revamped, after an unfortunate incident involving an epic flood.



Critical ingredients for beer: barley, hops, and yeast

(Photo by Anita Iyer)

All of their brewing and bottling occurs on the premises, to the soothing background music of death metal (or whatever the employees feel like playing). Stone use carefully selected hops from a variety of sources. Hops can add bitterness, citrus, and floral flavors to beer, and are classified based on relative amounts of acids. The more acidic hops go into Stone's famous hoppy beers, including Arrogant Bastard Ale, Oaked Arrogant Bastard Ale, Stone IPA, and Double Bastard Ale, while the milder hops go into the mellower beers, like the Imperial Russian Stout or Stone Smoked Porter.



Hops cooler

(Photo by Anita Iyer)

Stone has increased production every year, and produced 356,500 gallons of beer in 2010. It has a rigorous taste testing process using a carefully chosen focus group, which amounts to serving new beers at their annual employee party and getting everyone's opinion. Stone is not brewed for the masses, but they always sell all of their beer.

After learning about the beer, we were also given the opportunity to sample the fruits of Stone's labors with free tastings of beer. We then dashed over to the bistro to enjoy some food and more beer from an extensive menu of 32 craft beers on tap, with many others in bottles.

Now, when we buy a Stone ale, we know a great deal more about the science, dedication and hard work that go into making one of the best known craft beers.

April Strategy Session: Develop Effective Communication

By Margo Streets

The April strategy session, hosted and sponsored by Jones Day, featured presentations by committee members Dody Sears and Kai Zhang and guest speaker Cynthia Ryk. It focused on two communication topics: defining effective communication and listening.

The session began with an icebreaker: "Communication in my workplace would be better if..." Answers included: one has clear intent, is respectful, organizes thoughts before responding, and listens without interrupting.

The room split into the "True Colors" groups from the February strategy session and each group discussed their views on effective communication. The ideas were then shared with the whole group,

giving a good perspective on how the personality types differ on what factors are most important.

The second topic, listening, focused on empathic listening, a way to assist someone in problem solving. It includes these steps:

1. Listen Effectively: the speaker shares his/her thoughts/emotions without interruption or rushing.
2. Ask Diagnostic Questions: the listener asks questions encouraging self-examination without forcing his/her understanding of the situation.
3. Prescribe Suggestions: the speaker is allowed to reach his/her own realization resulting in ownership of the solution.

The color groups discussed and shared their ideas with the larger group. In general, people found it hard to not simply skip to step 3, but each color had its own struggle.

The session ended with two points: one reflective, asking a similar question to the icebreaker: "Communication in my workplace would be better if I..." and one as a reminder: communication does not only include speaking, but rather reaching understanding.

News Update on AWIS Members

Christine Shulse was inducted into the Bouchet Graduate Honor Society in a ceremony at Yale University on March 26th. The Bouchet Society seeks to develop a network of preeminent scholars who exemplify academic and personal excellence, foster environments of support and serve as examples of scholarship, leadership, character, service and advocacy for students who have been traditionally underrepresented in the academy.

To include your career and/or personal updates in the AWIS-SD newsletter, please email newsletter@awissd.org

Upcoming Events

WIST Conference

May 14, 2011, 8:00am-5pm, Salk Institute

Join us for our biennial conference at the Salk Institute. If you have any questions, contact us at wist@awissd.org. For more information and registration, please visit: www.wist2011.org

Mid-Career Coffee Club

May 19 and June 16, 2011, 7:45am-9am, Food court at northwest corner of Scranton Rd. and Mira Mesa Blvd. Informal forum for AWIS-SD members in leadership and/or management positions to openly discuss issues faced on a daily basis. For more information contact rsoloff@awissd.org

Coffee Club – Working Moms

March 24, 2011, 7:45am-8:45am, Nobel Park - 8810 Judicial Drive, San Diego, CA 92121

If you are a working mom, please join us for our morning walk. We will make our way to a local cafe while sharing our experiences with juggling a career and being a mom. After you register, we will forward additional details regarding our meeting location.

Contact : Jennifer Cho and Corine Lau

Strategy Session – Develop Financial Acumen

June 6, 2011, 6:00pm-8pm, JONES DAY, 12265 El Camino Real, Suite 200, San Diego, CA 92130

Manage your money for the ups and downs of life

Contact : strategyssessions@awissd.org

Morrison & Foerster LLP

Southern California Biotechnology Center at Miramar College

Synthetic Genomics, Inc

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About the AWIS Newsletter

The AWIS-SD Newsletter is published six times per year and provides AWIS members and supporters with information on Chapter activities, career development, and issues related to women in science.

Newsletter staff for May/June issue:

Nurith Amitai, Bhawanjit Brar, Mindy Davis, Kerri Hebard-Massey, Alka Malhotra, Denise McKee, Molly Moloney, Janice Payne, Shweta Sharma, Rachel Schwartz, and Geetha Srinivasan

Kerri Hebard-Massey stepped down as co-chair of the newsletter committee. We would like to thank her for her contributions as co-chair. We welcome **Denise McKee** as the new newsletter co-chair.

We welcome **Nurith Amitai** and **Molly Moloney** to the newsletter committee

Mindy Davis and **Bhawanjit Brar** are stepping down as committee members. We greatly appreciate their contributions to the newsletter.

FRIEND

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Rady School of Management, UC San Diego

Contribute to the Newsletter

If you are an AWIS-SD member, we encourage you to contribute to the newsletter. Please send articles, photographs, and member news as MS Word attachments to newsletter@awissd.org. News articles should not exceed 250 words, event summaries should not exceed 500 words, and feature articles (special-interest stories and profiles) should not exceed 1000 words. The submission deadline for the next issue is **June 10, 2011**.

AWIS-San Diego Sponsors

AWIS-SD thanks our corporate sponsors for their generous support. Donations from corporate sponsors help us fund scholarship awards, monthly events and Strategy Sessions, community outreach efforts, the Newsletter and the website.

For more information about how your company can support AWIS-SD, send e-mail to fundAWISSd@gmail.com.

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CONTRIBUTING

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Genomics Institute of the Novartis Research Foundation

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IMPORTANT CONTACTS**AWIS Board**

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To contact the Board, visit the following website:

<http://sdawis.org/about-awis-san-diego/board-members-awis>

Committee

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