Dear AWIS-SD Members & Friends,

I am very pleased to serve as your AWIS-SD President for 2014-2015. I am proud to be a long-term AWIS-SD member and active volunteer. I attended a Women in Bioscience conference (former name of WIST) in the 1990s and have been a member ever since. For those of you who don’t know me, let me summarize my involvement with this wonderful organization. I have been on the AWIS-SD Board for the past 3 years as a Member at Large. Past President Dorothy ‘Dody’ Sears and I were co-chairs of the very successful WIST conference in May 2013 at UCSD – Aspire, Attain, Ascend. Previously, I co-chaired the Strategy Sessions committee and served on the 2012 Scholarship Gala committee. In addition, I volunteer at Outreach events; I especially enjoy working with students to get them excited about science, technology, engineering, and mathematics (STEM). In my professional career, I have over 15 years’ experience in the life science sector. Currently, I am a project management consultant in pharmaceutical development.

2013 was a momentous year for AWIS-SD. We celebrated our 30th anniversary and received the Star Chapter Award for 2012-2013. The latter is a great honor from AWIS National. It acknowledges that our chapter has accomplished many key objectives outlined in the AWIS Strategic Plan to champion the interests of women in STEM. Last year, AWIS-SD hosted or participated in 40 activities, touching over 1000 people in San Diego County. A sampling includes: career development events such as WIST and the bimonthly Strategy Sessions, Leadership Network meetings, Coffee Club discussions, outreach participation in community science events, family day at Suzie’s Farm, etc. In addition, our chapter launched two new initiatives, Back-to-Work and Mentorship programs. Thanks to our generous sponsors, we awarded scholarships to seven accomplished young women.

2014 will be another exciting year for AWIS-SD with a full slate of events. First up is the New Year Celebration on Thursday, January 9, at Wine Steals in Point Loma. I am also looking forward to the first Strategy Session of the year on Monday, February 3, at a new location, Hera Hub. The topic is “Build Your Online Presence”. We appreciate the generosity of Felena Hanson and her staff at Hera Hub for offering to host our events at their beautiful facility.

Finally, I would like to thank the many volunteers for their dedication and hard work. I especially want to acknowledge Dody’s strong leadership as Chapter President for the past 3+ years, as well as the contributions of our Board members and committee co-chairs. As a non-profit organization, we rely on volunteers to plan, organize and execute our many activities throughout the year. AWIS-SD could not accomplish so much without you.

Happy New Year!

Grace
Grace Nakayama
AWIS-SD Outreach Committee Undergrad Career Panel
by Vicki Hurless

The AWIS-SD Outreach Committee recently organized the very successful 5th Annual “Exploring Careers in Science and Engineering: A Day for Undergraduate Women,” held at the San Diego County Office of Education in Linda Vista. This was a great central location for a relaxed lunch that offered young women a chance to inquire about careers in science.

This year, this inspiring event included 12 panelists and 26 attendees. Women from different fields of science and engineering were invited to share their experiences and answer questions for undergraduate women. The diverse panel included two engineers, a chemistry professor, a biomedical professor, a computational biologist, a computer science professor, a clinical lab scientist, a biotech director, a patent lawyer, a nursing scientist, and an interpretation specialist from the San Diego Zoo. The attending undergraduates comprised students from various colleges in San Diego, including California State University San Marcos, University of California San Diego, San Diego State University (SDSU), Palomar College, San Diego Mesa College and City College. We also had two high school students attend the event!

The panelists explained their career paths, their daily work, and provided valuable advice and tips during a panel discussion that was followed by a Q&A period. During lunch, the professional women sat at different tables to answer specific questions from the undergraduate women. The undergraduates rotated through the different tables, which gave them an opportunity to interact directly with the professional women in an informal and intimate setting.

All in attendance shared a lot of helpful information and encouragement and there were many interesting stories from some very different careers. Many attendees said that they would recommend this event to anyone pursuing a degree in science, technology, engineering, and mathematics (STEM). Casey Feltham, an undergraduate from SDSU in the California Institute for Regenerative Medicine internship program, commented that this event “was a great opportunity to hear about the possible career paths with a science degree” and that the panelists “were very informative and supportive.” Another undergraduate from SDSU, Katie Riel, said it “was awesome to meet women passionate about the sciences” and that it made her feel “empowered to pursue her education and interest in science!”

In summary, the undergraduate career panel was a great success and allowed professional women to encourage young women in STEM fields. The AWIS-SD Outreach Committee plans to hold this event every year, with the hope that even more undergraduates will hear these amazing stories in subsequent years.

A Tour of a Cell
by Alexandra Bortnick and Lauren Mack

During his lifetime, Dutch scientist and tinkerer Anton van Leeuwenhoek famously built more than 500 magnifying instruments, primitive microscopes to peer into common yet mysterious substances including rainwater, dental plaque, minerals and fossils. More than 300 years later, today’s scientists still rely on making observations through increasingly powerful microscopes to formulate hypotheses about natural phenomena hidden from the naked eye.

On November 9, 2013, a classroom of enthusiastic young ladies at the Reuben H. Fleet Science Center “rediscovered” the mesmerizing structures of plant cells under simple light microscopes. They observed the brick-like pattern of the cell wall and cell membrane separating upon exposure to a salt solution, and a wilted lettuce leaf “inflating” with water in a time-lapse video. Rather than recording their observations with pencil and paper as van Leeuwenhoek did in his many sketches, the class built edible models using candies that represented the relative size and shape of each cellular component. The critical water-storing organelle, the vacuole, took the form of a malt ball. Old favorites took on new meanings.

The Saturday Science Club for Girls (SSG) at the Reuben H.
Fleet Science Center in Balboa Park offers a monthly workshop tailored for 5th- to 8th-grade girls. Each workshop attracts about 15 to 20 girls and is dedicated to diverse science topics. Most of the time, classes are developed in-house and taught by Fleet Science Educators. Occasionally, local women scientists lead the class. With the help of two Fleet Center volunteers, AWIS Outreach members Alexandra Bortnick and Lauren Mack led the girls through a two-hour exploration of the structure and function of plant cells.

Along the way, the girls watched the effects of various liquids on cell integrity, toured the exhibit “Cellular Journey in the Fleet,” built models of cells and their organelles, and extracted DNA from strawberries. In addition, the girls hypothesized about the effects of salt on cellular structure based on their experience of swimming in the ocean. They also predicted the action of soap on squashed strawberries based on their knowledge of soap in the kitchen. To recall the function of each cellular component, the girls drew comparisons between the organelles and the building blocks of a chocolate factory.

After assembling their candy models, the girls shared their creations with their classmates. Finally, the girls learned that DNA resides tightly wound inside the nucleus and can be read like a recipe to create the disparate array of living things. The girls were surprised to find that strawberry DNA, like all DNA, is white, not red. Equipped with an eppendorf tube and string, the girls created strawberry DNA necklaces to take home.

Valerie MacPhee, Education Manager at the Fleet Center, invites local experts to lead the classroom on topics of their choice. What is so unique about this experience is the extended timeframe, use of exhibit materials, and enthusiasm of the participants. Most of the girls return each month from the 5th grade – the first year they are eligible – to their transition to junior high school. The missions of AWIS Outreach and SSG closely align, promoting hands-on exposure to scientific principles, practice using the scientific method, and informal, natural interactions with professional women scientists. Our visit was fruitful (in more ways than one).

AWIS-SD Members Volunteer Night at the San Diego Food Bank
by Lynda Groocock

On Wednesday, November 13, a group of AWIS members joined the The Scripps Research Institute’s ScrippsAssists volunteer club in checking, sorting and allocating hundreds of pounds of donated food that was collected from the recent food drive at Qualcomm Stadium.

These women, along with a few helpful family members, managed to process all of the donations in just two hours, a feat that would have taken considerably longer if it weren’t for everyone’s combined effort. Everybody did a great job!

ScrippsAssists holds volunteer nights at the Food Bank every 2nd Wednesday and 4th Thursday of the month. Anyone looking to volunteer with the organization should contact Mishelle McClanahan-Shinn (mshinn@scripps.edu). Alternatively, you can sign up for an independent volunteer shift at the Food Bank website (www.sandiegofoodbank.org). We look forward to seeing you there!

Revolutionizing Cancer Treatment
by DeeAnn Visk

We have all had “ah-ha” moments. I had one on October 15, 2013 listening to Razelle Kurzrock illustrate a new way of thinking about cancer and cancer drug development. Historically, cancers are categorized by the organ in which they originate. With the advent of genomic sequencing, cancers can now be grouped by the mutations they contain. Thinking about cancer in this way will revolutionize how this disease is treated therapeutically, researched in academia, targeted by drug companies, and conceptualized in clinical trial design.
GNF: Accelerating the Pace of Drug Discovery

The Genomics Institute of the Novartis Research Foundation (GNF), located in San Diego, is one of the Novartis Institutes for BioMedical Research. GNF scientists and engineers are working together to understand the underlying causes of disease and to develop and manufacture unique technologies, such as high-throughput automation systems, that enable breakthrough biology and change the practice of medicine. Learn more at www.gnf.org
This epiphany occurred at the recent meeting of the Southern California Chapter of Women In Bio at Janssen Labs, while listening to Kurzrock, one of three excellent speakers at the meeting.

Kurzrock pointed out that, while the light microscope was invented in 1590, it is still used today to diagnose cancer. While current cancer therapies are not quite as ancient, treatment for many cancers has not changed for up to 20 years. This is shocking, given the enormous strides in technology that have occurred in the last two decades. Most importantly, we need to change the paradigm of thinking of cancer as an organ-centric disease. Molecular abnormalities in cancer are not associated with the cancer’s organ of origin. Hence, we should treat cancers based on their molecular profile, not on where they originated in the body.

Kurzrock presented that, now that the genomic era is upon us, we can analyze the molecular signature of each cancer. Clinical trials need to be redesigned to be mutation-centric, not drug-centric. Multiple genetic markers should be employed to diagnose and classify cancers.

Generally, clinicians are entrenched in their way of thinking, which presents an obstacle to this kind of fundamental change. To paraphrase Max Planck, science progresses one funeral at a time. Regrettably, medicine also seems to progress this way. Previous ways of thinking about cancer have become so ingrained that many are not even aware of their underlying assumptions.

The concept of classifying cancer by mutational profile will also impact cancer research. How many times have you heard of a laboratory studying breast cancer, or prostate cancer, or liver cancer? Several more times than you hear about a laboratory studying a particular mutation in a cancer biomarker like the epidermal growth factor receptor (EGFR), I’ll bet.

Further areas of inertia include applications for new drugs submitted to the Food and Drug Administration (FDA). No drug has ever been approved to treat a mutation in a cancer (of any kind), rather than treatment of a cancer in a specific organ. This situation persists despite the fact that the FDA has indicated it would be open to this approach.

I hope the idea of classifying cancers by the mutations that drive them, not the organ in which they originate, changes how cancers are treated. Kurzrock did an excellent job of articulating and advocating for these changes. Employing old-school approaches to cancer is so engrained that we are often unaware of these underlying assumptions. Rethinking cancer biology certainly has changed how I would respond to a loved one being diagnosed with cancer. I would seek out a forward-thinking doctor, willing to utilize this new paradigm from the onset, not waiting for last-ditch efforts once the cancer re-occurs.

Challenging the current methods for treatment, research, and drug development will not be easy, given the institutional barriers that remain. Financial interests of the institutions involved will need to be realigned with this new paradigm. Either that or we need AIDS-activist-like protests to spur on this change in thinking. In the end, as with AIDS, it may be patient advocacy groups that can best bring about this change in thinking in the medical, pharmaceutical, research, and regulatory communities.

The views expressed here are solely those of DeeAnn Visk and not necessarily those of Women in Bio, AWIS-SD, Janssen Labs, NPR, or your local NPR station. Visk especially thanks Nurith Amitai for her extremely helpful editing.
Open House Report
by Afshawn Chakamian

AWIS-SD held its 12th annual Open House on Tuesday, November 7, 2013 at Janssen Research & Development. The event was a great opportunity for prospective and current AWIS members to meet and mingle.

The event was well attended, with a large crowd throughout the evening. Many women registered for AWIS, met new people, and learned about the various AWIS committees. Each committee was stationed at a table around the room. This gave attendees the opportunity to circulate and mingle while learning about each committee. Sign-up sheets were available for new volunteers. As an added attraction, silent auction items were set up at each committee table, including movie tickets, spa packages, hand-blown glass, paintings, and business programs, to name a few. People kept checking back at specific tables throughout the evening to make sure they were still the highest bidder for the item they wanted most! In addition, AWIS-SD tote bags and an Amazon.com gift card were raffled off to attendees. All proceeds from the silent auction supported the AWIS-SD Scholarship Program.

In the center of the room was a beautiful spread of finger food – asparagus wrapped with steak, melon wrapped with prosciutto, and lots of cheese and crackers. A friendly bartender in the back offered wine and other drinks.

At the end of the evening, Dody Sears, the San Diego Chapter President, shared the chapter’s accomplishments over the past year. Highlights included WIST 2013, a family day at Suzie’s Farm, and a new speed-mentoring program. Sears also shared the exciting news that the San Diego chapter won the Star Chapter Award from National, as well as details about what types of efforts AWIS National is making for women in STEM at the national and political level. Finally, Sears announced the Outstanding Volunteer Awardees:

- **Achievement in Innovation** awarded to Maha Gebara-Lamb, Ellen Dunn, and April Cresse
- **Rookie of the Year** awarded to Margie Mathewson, Helena Sun, and Shelly Trigg
- **Achievement in Outreach or Community Service** awarded to Vicki Hurless and Laura Cerviño
- **Outstanding Volunteer** awarded to Barb Davids
- **Leadership Service** awarded to Supriya Gaitonde
- **President’s Award** awarded to Janice Payne

The Open House was a great success and we look forward to seeing everyone again next year!

A big thank you to Janssen Research and Development for hosting the event at its beautiful facility and to the Open House committee, led by Diane Retallack and Barb Davids, for organizing every detail to perfection.

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Chemistry and Art Mix at ACS ChemExpo
by Nellie Shaul

Swirls of color and foam covered the hands of students and volunteers alike as crowds surrounded the AWIS-SD table at the 26th Annual ChemExpo. The event, organized by the San Diego chapter of the American Chemical Society (ACS), was held at Balboa Park on Sunday, October 27th. This event concluded the chapter’s celebration of National Chemistry Week. This year, more than 1,000 middle and high school students attended along with their parents and teachers.

AWIS-SD volunteers explained hydrophobic and hydrophilic interactions by helping students create art using shaving cream and food coloring. Food color is hydrophilic, while shaving cream has both hydrophobic and hydrophilic properties. As a result, the two substances do not readily mix or “dissolve.” When dropped on the shaving cream’s surface, the food color can be swirled around to make designs, as in the picture below. When paper, which is composed of hydrophilic cellulose, is placed on top of the pattern, the food coloring adheres to the paper following the ‘like dissolves like’ principle.

The long lines and repeat visitors attest to the popularity of this activity. “Kids” of all ages can get their hands dirty, create their own artwork, learn about a simple activity they can do at home, and get a chemistry lesson along the way.

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December Strategy Session
Enhance your Teambuilding: Effective Project Teams and Collaborations
by Andria Del Tredici

Our December strategy session, held on Monday, December 2, 2013, focused on how to build effective teams. Margo Streets and Linda Manza organized a highly interactive session that included four activities:

1. **Who am I?** As each of us signed in for the session, each of us received a label on our backs that had the name of a famous woman in science. To figure out which name was on our back, we had to ask other attendees questions. Some of us were able to ask any question, while others were restricted to yes or no questions.
Hilarity ensued, as the possible answers ranged from Marie Curie to Henrietta Lacks to Dody Sears!

The lessons learned: Communication is important, and some tasks cannot be completed without communicating with others. We also learned more about women in science.

2. Describe the Object. For this activity, we organized into groups. One person in each group was assigned to be The Communicator, and was the only person who could view a picture of connected shapes. The Communicator then had to describe the picture to the other members of the group, who had to draw the picture as accurately as possible based solely on The Communicator’s description.

The lessons learned: Communicating too much detail too early can impede progress. For example, we learned that the scale of the picture was important to convey at the beginning; otherwise, you ended up with a tiny reproduction of the original.

3. Pin the Palm Tree on the AWIS Icon. For this activity, three volunteers were blindfolded and asked to place a palm tree sticker on an AWIS icon hanging on the wall. One volunteer had no input from the group, a second volunteer had everyone yelling directions at her, and a third volunteer had a couple of people who gave her directions.

The lesson learned: Teams are most efficient when one or two members are in charge.

4. Marshmallow Challenge. Each group was challenged to build, within 15 minutes, the tallest tower with 20 pieces of spaghetti, a marshmallow, a meter of ribbon and a meter of sticky tape.

The lessons learned: Teams that build prototypes early are more likely to have a standing structure. These teams are not likely to have members who are jockeying to be the leader of the group. On the other hand, teams that spend the majority of time planning do not identify incorrect assumptions (e.g., marshmallows are light) early on, and thus cannot account for the incorrect assumptions.

The main take-home message was that communication is the key to effective teams. We also learned about the potential value of collaborations in increasing creativity and productivity. We discussed how clear goals, and a clear understanding of each individual’s role in achieving those goals, were keys to effective collaborations, especially in cross-functional teams. Finally, we discussed how a sense of ownership is critical to maintaining a successful team. We left the session feeling empowered to build effective teams.

The Strategy Sessions committee would like to thank Jones Day for hosting the Strategy sessions for the past 2 years. Our 2014 venue will be Hera Hub in Sorrento Valley.

How Long Can You Wait to Have a Baby?
by Afshawn Chakamian

Women in science, technology, engineering, mathematics, and medicine (STEMM) often wonder if, and when, to have children. STEMM women often try to find the “right” time to have a baby, but worry about waiting too long in fear of not being able to get pregnant. On November 21, 2013, many of these STEMM women met to hear a thought-provoking session on current fertility data as well as hear firsthand from a panel of women about their personal journeys related to parenthood.

Jean Twenge, a professor of psychology at San Diego State University, spoke about her recent article in The Atlantic, titled “How Long Can You Wait to Have a Baby?” Twenge started the session by scaring all the young STEMM women by sharing the fertility statistics we hear every day – one in three women ages 35 to 39 will not be pregnant after a year of trying. In addition, a woman’s chance of pregnancy is only 20% each month at age 30 and steadily drops to 5% by age 40. Twenge then shared some good news – the source of these statistics. The first statistic, Twenge noted, is based on French birth records from the 1700s. Not quite modern times!

Unfortunately, only a small number of natural fertility studies have been done in modern women. Of the few studies performed, however, the results are encouraging. One study showed that 78% of sexually active women ages 35 to 40 are
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pregnant within a year (compared to 84% of women ages 20 to 34). Twenge shared additional data showing that fertility begins to really drop at age 40, not 35 as previously believed. Another topic Twenge discussed was the pressures from society to have children young, and the trade-off between having children later in life vs. younger in life. One may not be financially stable enough, or even responsible enough, to have a child in the “prime” years of their mid-20s. As one gets older, she may not have as much energy to raise a child as a younger mom, but instead have more resources and life experiences.

After Twenge’s discussion, a panel of five scientists, professors, and doctors shared their personal stories. The women had different backgrounds – some had never had children, others had children while juggling demanding jobs – but they all shared great stories and provided advice to the young STEMM women in the audience. The main message of the panel was that there is really no “right” time to have a baby, there is no specific path one must take to have a child, and that it is possible to have a successful career while raising a child. The audience also had a chance to ask the panel questions. “When is the best time to have a baby?” was the most popular inquiry. The panel consensus was: when you have enough money to afford good day care!

Overall, the evening was a great opportunity for women in all stages of their professional or academic careers to know that we can wait a little longer than we think to have a baby!

Thank you to the event sponsors (AWIS San Diego, the UCSD Postdoctoral Association, and UCSD GradWISE) for putting on the free event.

Read Twenge’s full article in The Atlantic here.

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<th>Science News Ticker</th>
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<td>The University of California San Diego (UCSD) ranked fifth in research funding nationwide, outdoing such prestigious institutions as Harvard, the Massachusetts Institute of Technology (MIT), and Stanford. While U.S. research funding has dropped by 1.1% in the past few years, it increased at UCSD over the same time period. George Koob of The Scripps Research Institute will become the director of the National Institute on Alcohol Abuse and Alcoholism (NIAAA). The NIAAA is part of the National Institutes of Health (NIH). The NIH grants approximately $30 billion in grant money annually; San Diego County received $750 million this fiscal year. A $200,000 grant from the Amgen Foundation will allow the nonprofit San Diego Workforce Partnership to continue implementing a program that lets nearly 50 schools in San Diego, Imperial and Riverside Counties simulate their own biotech labs on campus. The Amgen Biotech Experience, which expanded to the San Diego region in 2005, provides research-grade equipment and supplies to schools, teachers training for classroom exercises, and includes a summer component called the Life Sciences Summer Academy. The National Cancer Institute has reported that mortality rates for all types of cancers decreased 13% from 2001 through 2010, at a rate of 1.5% per year. The death rate declined for men and women of all major ethnic and racial groups. In San Diego County specifically, the cancer mortality rates dropped 1.3% per year. Lung cancer, the most deadly cancer, dropped 2% per year in San Diego County. Overall, San Diego County’s cancer death rate is lower than the national average. J. Craig Venter, who assisted in sequencing the first complete human genome, opened a $37 million, 45,000 square-foot institute at UC San Diego in November. Sequencing genomes of new organisms will be one focus of the institute. The San Diego science community breathed a sigh of relief as the budget deal passed by the US Congress in December banished the prospect of more disruptive cuts in government funding.</td>
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<th>Member News</th>
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<td>Former AWIS-SD Board Member at Large, Tamera Weisser, was awarded the &quot;Women Who Mean Business&quot; Award by the San Diego Business Journal. Weisser was chosen from a pool of 160 finalists and presented with the award at San Diego Business Journal's 20th anniversary luncheon held on November 13, 2013. The purpose of the awards is to recognize dynamic women, business leaders, and role models. Winners are selected for their achievements and contributions to San Diego's businesses as well as the growth and vitality of San Diego's business, civic, and cultural landscape. Weisser is an Intellectual Property partner at the San Diego law firm Jones Day, where she primarily focuses on biotechnology patent prosecution and related IP strategic counseling. She also serves in leadership roles in a number of local professional organizations geared toward advancing women in the law and science, technology, engineering and math (STEM) fields.</td>
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<th>Upcoming Events</th>
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<tr>
<td>New Year Celebration</td>
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<td>Thursday, January 09, 2014, 5:30pm -09:00pm</td>
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<tr>
<td>Wine Steals Point-Loma</td>
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<tr>
<td>2970 Truxtun Road, San Diego, CA 92106</td>
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<td>Cost: $10/member, $15/non-member</td>
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Come socialize with friends, co-workers, and colleagues in a warm and relaxing atmosphere filled with food, wine, and music.

Appetizers, salad, pizza, and wine provided.

This event is open to members and non-members. Please RSVP.

Back to Work Coffee Club
Wednesday, January 15, 2014, 11:30am
Sammy's Woodfired Pizza
12925 El Camino Real, San Diego, CA 92130

A Coffee Club for women interested in transitioning back to the work place especially after an absence. Join us to share your experiences and challenges, for support and encouragement and to help develop programs that will assist women in going back to work.

Please contact: backtoworkinitiative@awissd.org

Mid Career Coffee Club
Thursday, January 16, 2014, 7:45am - 9:00am
Inside the food court at the northwest corner of Scranton Rd. and Mira Mesa Blvd.

Informal peer networking forum for AWIS-SD members in leadership and/or management positions to openly discuss issues faced on a daily basis.
Please contact: coffeeclub@awissd.org

FEBRUARY STRATEGY SESSION: Build Your Online Presence
Monday, February 3, 2014 6:00pm to 8:00pm
Hera Hub
9710 Scranton Road #160
San Diego, CA 92121

Is using LinkedIn really necessary to find a job in industry? What can I say about my company/lab/school on Facebook? How do I optimize my resume for a Human Resources Department? Come to the first AWIS-SD Strategy Session of 2014 to find out the answers to these and other questions addressing your online presence.

Networking – 6:00 pm, Workshop – 6:30 - 8:00 pm
Light refreshments will be served.
Bring your wireless device to connect to the internet and receive real-time feedback on your LinkedIn profile.
Also remember your business cards.

Come and learn how to use LinkedIn and other social media to your advantage professionally.

This is the only Strategy Session in 2014 where non-members may attend for $10 in cash or check at the door (sorry, no credit cards).

Please register here.

Expanding Your Horizons
Saturday, March 01, 2014, 08:00am - 03:30pm
University of San Diego

Expanding Your Horizons (EYH) is an annual conference held at the University of San Diego. Approximately 600 sixth- to tenth-grade girls from throughout San Diego County participate in three workshops throughout the day in small groups (approximately 10-15 students), escorted by two female college mentors. This is a great opportunity to have fun and motivate young women to pursue science, math, and technology! The AWIS-SD Outreach Committee needs volunteers to present or help run a number of different hands-on science workshops, including our popular “Crime Scene Sleuth” workshop. If you have an interest in leading a workshop, but aren’t sure what to do, the AWIS-SD Outreach Committee can provide suggestions, and complete instructions for workshops from a variety of different science and engineering disciplines. Most are very simple to learn and execute, and all costs for materials are reimbursed by AWIS-SD.

Please register via the link below. Upon registration you will be contacted with information about the workshop you will be assigned to. If you have a preference (know about an AWIS-SD workshop already) please let the contacts know.

http://sdawis.org/events/events-calendar/icalrepeat.detail/2014/03/01/433/42/expanding-your-horizons

Local Events of Interest

Birth to Grandmotherhood: Childrearing in Human Evolution
Friday, February 21, 2014, 1:00-5:30 pm
Hojel Hall of the Americas Auditorium, Institute of the Americas (UCSD Campus)

The goal of this symposium is to take a broad view of the importance of child-rearing in human evolution, from birth to the impact of grandmothers. From the moment of birth, human infants require an inordinate amount of care and, unlike our nearest living relatives, remain dependent on a variety of caretakers during an unusually long maturation period followed by extraordinary adult longevity. How did such a distinctive pattern of development evolve and what other human features are linked to it? This conference will take a comparative perspective and consider neuroendocrine factors, energetics, life-history trade-offs and consequences
Admission is free and open to the public; however, registration is required. To register, go to: http://carta.anthropogeny.org/events/from-birth-grandmotherhood-childrearing-human-evolution

A live webcast will also be offered for those who would like to view the proceedings remotely. Look for details on the event page.

San Diego Biotechnology Network
Speed Networking Event
January 13, 2014 5:30pm to 9:00pm

Green Flash Brewery
Register here

About the AWIS-SD 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 January/February issue:
Nurith Amitai, Afshawn Chakamian, Nancy Choi, Priya Choudry, Andria Del Tredici, Jessica Moore, Madhuvanthi Ramaiah, Pat Rarus, Shweta Sharma, and DeeAnn Visk.

Part of AWIS National Fee is Tax Deductible
AWIS is a 501(c)(3) tax exempt organization engaged in advocacy. Advocacy involves raising awareness and providing education about a particular issue to the public as well as members of government. (Lobbying, on the other hand, involves trying to influence particular decisions made by the government, usually focused on a specific piece of legislation.)

All but $24 of membership dues and 100% of contributions made to AWIS are charitable contributions for federal tax purposes. Check with your tax professional to determine the appropriate amount of your deduction. The AWIS Tax Identification Number is 23-7221574.

Taken directly from the AWIS National website.

Contribute to the Newsletter
We encourage contributions 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 February 10, 2014.

About the Authors
Alexandra Bortnick studies gene regulation of immune cells at UC San Diego. She completed her graduate work at the University of Pennsylvania in immunology. For more details, please refer to her LinkedIn page.

Afshawn Chakamian combines her love for science and business every day at PRA International, a contract research organization that helps pharmaceutical and biotech companies run clinical trials. Outside of work, she loves sports, cooking, and tea. For more information or to contact Afshawn, please visit her LinkedIn page.

Andria L. Del Tredici, Ph.D., has been a member of AWIS-SD since the late 1990s. She is currently a Principal Investigator in Scientific Product Development at Millennium Laboratories. She also volunteers in her kids’ classrooms and helps to manage her son’s soccer team.

Vicki Hurless is the Co-Chair for the AWIS-SD Outreach Committee. Her passion for learning and science has led her to conduct graduate studies at the Cell and Molecular Biology Joint Doctoral Program between San Diego State University and the University of California, San Diego. Vicki loves combing the beach for marine invertebrates, skiing, and the University of Washington Huskies!

Nellie Shaul is finishing her Ph.D. in marine chemistry at the Scripps Institution of Oceanography (UCSD). In addition to her research on marine pollution and teaching undergraduate courses in earth science at UC San Diego, Nellie is also passionate about science outreach and informal education in the San Diego area.

DeeAnn Visk, Ph.D., is a freelance science writer, editor, and blogger. She loves working at the bench in molecular biology, genetics, and microscopy. DeeAnn lives in the San Diego, California area with her husband, two kids, and two spoiled hens.

Information for the remaining authors was not available at press time.
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