Mission Statement: The Association for Women in Science, Inc. (AWIS) champions the interests of women in science, technology, engineering, and mathematics across all disciplines and employment sectors. Working for positive system transformation, AWIS strives to ensure that all women in these fields can achieve their full potential.

#### **Letter from the President**



Dear AWIS-SD Members & Friends,

What a terrific Open House! With almost 200 women and men in attendance, I appreciated the opportunity to network with current and prospective members. Open House 2015 was an excellent occasion to introduce AWIS-SD to the greater community, highlight our committees and activities, acknowledge our long-term members, and recognize the committed volunteers who contribute to our chapter's success. I was pleased that the silent auction raised over \$1100 — more than enough to cover one AWIS-SD scholarship in 2016. Kudos to DeeAnn Visk, Danielle John, and the Open House Committee for organizing a highly successful event. Many thanks to Qualcomm for generously hosting us in their spacious facility.

During Open House, we recognized the recipients of the 2015 AWIS-SD/UCSD Extension Continuing Education scholarships, Joanna Redfern and Rachelle Trial. These \$1000 scholarships are intended to help members who have taken a career break to take courses at UCSD Extension. I want to acknowledge the Back to Work Initiative led by Maha Gebara-Lamb, April Cresse, and Ellen Dunn, along with Shannon McDonald of UCSD Extension, for continuing this mutually beneficial partnership for the second year.

My favorite part of Open House 2015 was presenting the annual Volunteer Awards to deserving members. This

year's recipients exemplify how active volunteers can positively impact AWIS-SD. I want to highlight these extraordinary women and thank them for their contributions to our chapter.

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The two <u>Rookies of the Year</u> joined AWIS-SD within the past 12 months and have become enthusiastic and committed volunteers of our organization. As new members, Danielle John and Lin-Chien Huang became active immediately, and they also stepped up to co-chair the Open House and Strategy Session Committees, respectively.

Liz Clark is the recipient of the <u>Achievement in Innovation</u> Award. As co-chair of the Website Committee, she was instrumental in rebuilding <u>www.awissd.org</u> in 2014, and she continues to make enhancements to the website to meet the chapter's needs. In addition, she was a member of the Women in Science and Technology (WIST) 2015

Publications Committee.



Barbara Armstrong and Liz Clark photo credit: Sophie Muscat-King

The recipients of <u>Achievement in Outreach or Community Service</u> Award are Robyn Wygal and Anne Kornahrens, cochairs of the <u>Outreach Committee</u>. Thanks to their ongoing efforts, <u>AWIS-SD</u> participates in community science, technology, engineering, and math (STEM) events throughout the year. This committee also organizes AWIS-SD-specific activities, such as the semi-annual career panel and the awards banquet for girls with outstanding posters at the Greater San Diego Science and Engineering Fair.

The Board recognizes three highly effective committee cochairs as recipients of the <u>Leadership Service</u> Award. They are: Leslie Crews (Strategy Sessions), Kathy Oglivie (Corporate Sponsorship) and Nurith Amitai (Newsletter). Their leadership strengths have enabled our chapter to continue providing high quality programming throughout the year.

The <u>Board Special Award</u> is given to the chapter member(s) whom the AWIS-SD Board recognizes as exemplifying the AWIS-SD mission through excellence in leadership, community service, innovation, and promoting AWIS-SD. Laura Cerviño and Erna van Niekerk co-chaired the Scholarship Committee in 2013-2015, and they helped to select 21 exceptional women to receive AWIS-SD

scholarships during those three years.



Danielle John discussed public relations with an attendee. Photo credit: Sophie Muscat-King

The Board selected two recipients of the <u>Outstanding Volunteer</u> Award. Kerstin Kirchsteiger is the co-chair of the Corporate Sponsorship Committee. Thanks to the diligent efforts of this committee, our chapter reached our fundraising goals in 2015. Robina Shaheen was a co-chair of WIST 2015, as well as a volunteer on other AWIS-SD committees.



Dominique Lenoir, Dorothy Sears, and Robina Shaheen photo credit: Sophia Tsai

Last but not least, the <u>President's Award</u> goes to Linda Manza for demonstrating continued service and enthusiasm and for making immeasurable contributions to the San Diego chapter. Linda has been actively involved with our chapter for many years, with past and present service on the Strategy Sessions Committee, Secretary on the AWIS-SD Executive Board, AWIS-SD Leadership

Network, WIST 2015 Committee co-chair, and Newsletter Committee co-chair. She also has a role for AWIS National as Chapters Committee representative for the AWIS-chapters in the western states.

Finally, I want to let you know that my term as AWIS-SD President will end on December 31, and this is my last President's Letter. These past two years as Chapter President have been professionally and personally rewarding for me. I am humbled by all the amazing people that I have met and grateful for the exposure I have received as the President of this wonderful organization. Thank you all for your support of AWIS-SD and our mission. I hope you and your family have a wonderful holiday season.

Most sincerely,

Grace

president@awissd.org

#### Water Challenges in San Diego

by Anne Kornahrens

This past August, members of AWIS-SD had the happy opportunity attend an event at the North City Water Reclamation Plant in La Jolla. This interesting event included an explanation of the Pure Water San Diego campaign and a tour of the Advanced Water Purification System. The tour culminated with an opportunity to drink the potable, recycled former sewage water. This might seem like a surprising choice for a treat, but the combination of technology and policy that led to that moment was enough to make all participants anxious to taste the water.

The collaborative effort of the AWIS-SD Events Committee and the San Diego Chapter of the Society of Women Engineers (SWE-SD) brought together about 25 participants from both organizations. Meena Westford, Special Projects Manager at the Metropolitan Water District (MWD) of Southern California, kicked off the presentations.

The MWD is a water wholesaler that was originally created in the 1920s to manage the Colorado River aqueducts. Southern California water is now supplied from a variety of sources: 20-30% from Northern California (originating as snowmelt from the Sierra Nevada Mountains), 25% from the Colorado River aqueduct, and the remainder from local supplies. This

last portion can include water from recycling plants, desalination, and groundwater cleanup.

This status quo has been disrupted by the drought. Though San Diego has successfully cut water usage in 2015, achieving a 26% decrease, there are still risks in continuing with the current sourcing procedures. Some uncertainties include how long the drought will last, capital financing, impact on endangered species, energy costs, and water quality.



Group shot of attendees on the North City Water Reclamation Plant

photo credit: Anne Kornahrens

Cathy Peroni, Program Manager at San Diego Public Utilities, spoke further about the need for new local water sources for San Diego. Currently the city obtains less than 15% of its water demand from local sources. A natural disaster could salinate reservoirs and destroy pipes that are key to transporting water from Northern California. This threat lends additional incentive to developing local sources of potable water and methods of water storage. Peroni also expanded upon the regulation challenges faced, including determining the best source of new water, seeking City and constituent approval, and implementing the plan. The city of San Diego has been working over the last decade to surmount these hurdles, and the Pure Water San Diego project is the exciting result.

The first two phases of the City's efforts involved increasing local water reuse and recycling. The North City Water Reclamation Plant now manages 30 million gallons of recycled water per day. This has historically generated non-potable water, used for irrigation for clients such as the Torrey Pines Golf Course. In 2009, the Advanced Water Purification Facility was opened at the La Jolla site to allow the validation of further

technology which would generate drinking water.

Results from this trial were positive, which contributed to the passing of the Pure Water San Diego program by a unanimous vote by the San Diego City Council in November 2014. The 20-year program will include three phases to allow the use of reclaimed, potable water throughout the city. This could ultimately provide 83 million gallons per day, or one third of the city's future potable water needs.

Future hurdles include determining safety standards, energy use evaluations, and cost comparison. A similar sewage-to-potable water system has been successful in Los Angeles for the past eight years. So, if you have been to Disneyland recently, you have likely already tasted this new water source.

For a more detailed look at how the process works, AWIS-SD and SWE-SD were then led on an in-depth tour of the facilities by Aleks Pisarenko, a technical consultant at the plant and a senior engineer with Trussell Technologies, an environmental engineering firm focused on process and water quality. Pisarenko's consulting work for the city has involved running the model purification system at North City Plant as well as performing over 28,000 tests screening for 140 compounds in the purified water.

The advanced treatment plant has three components: membrane filtration, reverse osmosis, and UV disinfection and advanced oxidation. As we walked through the plant, each stage was clearly laid out and explained to us. We had the opportunity to look at the membranes for the first step, with fiber widths that are 1/300 the size of a hair. The next step – reverse osmosis – uses energy to force water molecules through tiny pores to remove even smaller particles. Lastly, the water is disinfected using UV light and

hydrogen peroxide. The resulting water has such low levels of minerals and ions that treatment would be required before pumping the water to the next stage. Surprisingly, the water would otherwise be too pure and could damage the metal pipes!

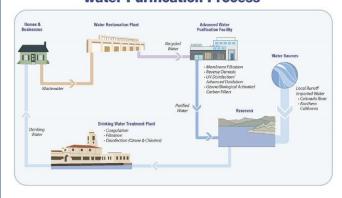
The demonstration plant currently produces one million gallons of this highly pure water every day. The last step of our tour was to gather around a sink. Small paper cups were dispersed and filled with the purified, recycled water. The group collectively seemed quite happy to drink the refreshing, reclaimed water. And they were certainly delighted see the innovative people

and technology working to provide San Diego with a new local water source.

To find out more or to go on a public tour of the plant, visit

http://www.sandiego.gov/water/purewater/

#### **Water Purification Process**



# AWIS-SD Strategy Session: Advance Your Goals Through Negotiation

by Ksenya Cohen Katsenelson

October's AWIS-SD Strategy Session was focused on the topic of negotiation. AWIS-SD members gathered to discuss negotiation at the workplace and to practice strategies to become successful negotiators.

Cherie Ng, Scientist at the San Diego biotherapeutics company aTyr Pharma, started off the discussion by explaining how important negotiation is in life. Only 7% of women negotiate for their salary, compared to 57% of men! This is actually a huge disadvantage for women. In face it demonstrates why men earn \$4000 more than women per year. This might seem like a small amount; however, if a woman would negotiate for her salary, she has the potential to make almost \$1 million more at retirement compared to a woman who does not negotiate at all.

Actually, we can negotiate everywhere and for everything, not just for salaries. We can negotiate with our cable company, with our landlord, with our kids, etc. Referencing books such as *Lean In* by Chief Operating Officer of Facebook, Sheryl Sandberg, Ng pointed out that women are actually very good negotiators, even more so than men, when it comes to negotiating for others. Therefore, it would be useful for women to see ourselves as a product, or a client, and therefore promote ourselves and negotiate for ourselves.

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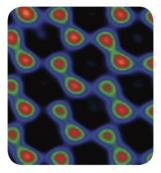
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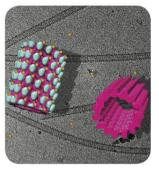


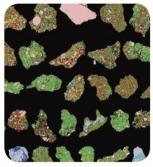
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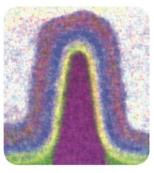
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(From left to right) Atomic resolution phase image of graphene. Sample courtesy of N. Alem and A. Zettl, University of California, Berkeley. Images Joerg Jinschek and Emrah Yucelen, FEI, Hector Calderon, IPN, Mexico, and C. Kisielowski, NCEM, USA. Exit wave reconstruction by Joerg Jinschek. Helical reconstruction of microtubules decorated by an Eg5-metallothionein-gold complex. Image: Cedric Bouchet-Marquis. Drill cuttings from a CO<sub>2</sub> injection well. Image: CO2CRC, Australia. 22 nm PMOS transistor structure. Image: FEI NanoPort.

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Cheryl Ng presenting at Hera Hub photo credit: DeeAnn Visk

Jennifer Kuo, Graduate Researcher at the University of California San Diego, presented some important steps for ensuring effective negotiation. These steps included: (1) Assess the specific situation – will the benefits of engaging in this negotiation outweigh the costs? (2) Put yourself in the other person's shoes and assess the situation from their point of view. (3) Always prepare before the actual negotiation by being clear about your own interests, learning the interests of your counterpart, identifying possible questions, and generating ideas and options ahead of time. (4) During the negotiation, always ask your counterpart about their needs, and then offer unique information about yourself that shows how you fit those needs. (5) Finally, always "package" the negotiation: suggest solutions and make proposals to solve the issues. Use statements such as "if/then" to show how you will satisfy the needs of your counterpart with your unique skills.

The most useful part of the Strategy Session for me was the chance to actually practice our negotiation skills with other participants. Every two members received a case in which both of them had to negotiate over one issue that affected both of them. One example was a negotiation between a department chair at a state university and a new faculty hire. Through this kind of negotiation, we learned that both sides have their own, potentially different interests, but by working together, talking, and negotiating correctly, we can accomplish a mutual agreement that makes both sides happy.

It was a fun and exciting night, and I left the Strategy Session with new ideas for better negotiating for my own interests. I also felt a higher level of self-confidence. I highly recommend participating in AWIS-SD Strategy Sessions, where you can learn skills that will help you not only in your work, but also in the rest of your life.

### Tale of Two Planets: Red Planet – Blue Planet

by Robina Shaheen

The recent news regarding the discovery of brine on Mars, suggesting liquid water may have existed, or may even still exist, on the Red Planet, have intensified speculations about the possibility of life on Mars. Though water is an essential ingredient for life, the mere presence of liquid water does not mean biological activity. The vignette below, featuring a dialogue between a young boy who loves science fiction and his aunt, a scientist working on actual Mars chemistry, is meant to explain the prerequisites for life as we know on the planet Earth.

There is no end to what humans can achieve with their bold imagination—the sky is not the limit, but rather it is the first stop in space travel. We landed the first man on the Moon in 1969 with primitive electronics that can now fit into the palm of your hand as a modern cell phone.

Bina smiled while enjoying her nephew Ali's excitement, who was still deeply engrossed in the giant poster of Matt Damon advertising the movie *The Martian*, perhaps imagining himself in his space suit. She recalled her own fascination with space travel as a little girl. She had watched the Apollo 11 mission hundreds of time, almost to the point that she could hear Neil Armstrong whispering in her ear every morning while getting ready for school: "One step for a man, one giant leap for mankind." She had wanted to be an astronaut one day, and now could tell what little Ali was dreaming about.

"The next destination on our space journey is surely going to be Mars, perhaps soon," she murmured quietly to herself. Mars is the fourth planet in our solar system and half the size of the Earth. Can we establish a self-sustaining human colony on the Red Planet (its reddish appearance is due to abundant iron oxide on its surface), as shown in the movie? After all, it is our sister planet, formed from the same primitive material as Earth, and it happens to also be located in the so-called

habitable zone, the distance from the Sun where water can exist in the liquid state.

The movie, *The Martian*, is no doubt a thriller—exciting everyone's imaginations, especially those of teenagers and kids. Bina and her nephew Ali artfully weaved through the tightly packed crowd in the theater lounge full of people ready for the next show. The movie had sparked Ali's imagination and he was carefully crafting his long list of queries, recalling news from the NASA's website and comparing them with the movie on his way back home.

**Ali:** Aunt, I did not see liquid water on Mars in the movie *The Martian*; however, NASA claim to have found water on Mars. I do not understand this discrepancy.

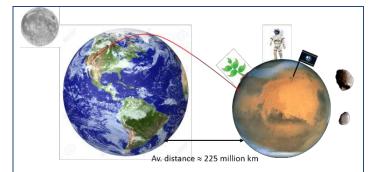
**Bina:** Yes, you are absolutely right, present-day Mars does not contain liquid water, flowing in streams and oceans, like we have on our beautiful Blue Planet. It can't exist as liquid water. Remember the phase diagram from college chemistry? At pressure as low as 7 millibars, water is mostly in the vapor phase.

**Ali:** Yes, I do remember nice images of the polar ice caps on Mars captured by the Hubble telescope. The Curiosity Rover, during its first marathon on Mars (10 km, April 16, 2015), also confirmed the presence of ice on Mars.

**Bina:** Thanks to the low temperature on Mars (-55°C, -67°F), water remains frozen that would otherwise be lost to space as vapor. During a summer day, surface temperatures on Mars at the equators can be pleasant (+20°C, +68°F). But still, it is not like living in beautiful San Diego, because Mars has frequent, intense dust storms. As the sun sets, temperatures drop again. The night is really chilly (-73°C, -100°F), causing everything to freeze—even  $CO_2$  from the atmosphere freezes along with the water.

Ali: What about the 95%  $CO_2$  in Mars' atmosphere, which acts as a blanket? On Earth, we have only 400 ppm of  $CO_2$ , and yet it keeps the surface of our planet warm.

**Bina:** Remember, the air on Mars is very thin (about 7 millibars of pressure). If we took one cubic meter of air from Mars and brought it to Earth, it would be compressed to  $\sim 3$  cm<sup>3</sup>. On earth, we have the greenhouse effect from both the clouds and CO<sub>2</sub> gas.



Caption: Inhabiting the Red Planet. The shortest distance between Earth (at aphelion, the point furthest from the Sun) and Mars (at perihelion, the point closest to the Sun) is 54.6 million km, and when they are the farthest apart, the distance reaches 401 million km. The size of Earth, Moon, and Mars are approximate to fit in the image.

Ali: Does that mean we cannot breathe on Mars? Aha, I remember from my story book, *Climbing Everest*, that the pressure on Mt. Everest is very low (approximately 360 millibars), and mountain climbers experience great difficulty in breathing.

**Bina:** Absolutely! The Mars Science Laboratory on the Curiosity Rover and NASA's MAVEN (Mars Atmosphere and Volatile Evolution Emission) mission have measured very low amounts of oxygen on Mars: only 0.002%, unlike the 21% on Earth. It would be impossible to breathe without a tank of O<sub>2</sub> gas on Mars.

**Ali:** I know plants produce oxygen from water during photosynthesis, but how long would it take to produce enough oxygen for breathing?

**Bina:** Hmmm, great question. It takes millions of years to change the composition of an atmosphere's worth of air to add enough oxygen to breathe. But your plants growing on the surface of Mars would not be able to cope with the strong ultraviolet, cosmic, and galactic radiation (millions to billions of electron volts). On Earth, the stratospheric ozone layer protects us from the harmful UV radiation, and Earth's magnetic field deflects cosmic and galactic radiation. Earth's magnetic field is relatively weak at the poles, so sometimes these strong cosmic radiations can enter into our atmosphere near the poles. They can react with the oxygen and nitrogen molecules in our air to produce a beautiful green and red aurora, sometimes called Northern Lights.

**Ali:** Yes, I love these blue-green lights expanding like a curtain across the sky. Aunt, I have already signed up for



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the first human trip to Mars in 2030. I cannot wait to see the largest mountain in our solar system, Olympus Mons, and to view Mars' two moons, Phobos and Deimos, in the night sky.

**Bina:** Bear in mind, it is going to be one way trip, unlike the movie *The Martian*. Neither NASA nor any private firm has developed any technology to bring humans back from Mars.

Acknowledgement: I would like to thank Nurith Amitai and Peter Newbury for discussions on this topic.

#### **Transitioning to Industry:**

#### Skills Honed by Working on the Newsletter Committee

by DeeAnn Visk and Nurith Amitai-Crawford

What are the skills beyond writing and editing that are gained by working on the Newsletter Committee? Getting a newsletter published sounds trivial until you actually try to do it.

For starters, if you are a co-chair on the committee, you learn how to work remotely with your fellow co-chairs and the rest of the committee via email. This can be a useful ability in our modern economy, where more and more professional interactions are handled remotely via computers.

Numerous individual tasks need to be completed in order to produce and publish a newsletter, such as: calls for member news, following up with people who have promised to write an article, and compiling the newsletter itself. Keeping careful track of these tasks is a form of project management experience, which is increasingly in demand with many employers these days. Additionally, you will be developing leadership and organizational skills.

Why do we always send out member-wide calls for information via Constant Contact? Why not use a normal email account? Using an email marketing company is important for a number of reasons. Using your individual email address to send emails to a large mailing list can easily get you labeled as a "spammer"—resulting in routine messages to people with whom you want to communicate being shuffled into their spam folders. Also, the law requires that those on email lists must be able to unsubscribe, a feature automatically added on Constant Contact emails. Email marketing

companies like Constant Contact also offer additional features, such as statistics on how many recipients actually opened the message. Experience in working within these email marketing systems is another skillset that gets added to your resume as a Newsletter Committee co-chair.

You also learn to think carefully about who your audience is. This is important both in writing the articles to engage your audience, but also in developing the content of the newsletter. Is the article something that will interest your readers? Will the article assist them in furthering their careers? Does the article address women-specific needs in science?

Practicing diplomacy is another skill developed while working on the Newsletter Committee. How do you gently tell someone that the article she is pitching is not a good fit the newsletter? Getting the right tone in emails is tricky, so you learn when to pick up the phone and call.

Developing your vision for the newsletter may lead to the creation of new sections of the newsletter. For example, Visk proposed and instituted the "About the Authors" section to allow our contributors to tell the readers a little about themselves. Such upgrades allow you to demonstrate your imagination, your proactive approach, and your willingness to think and act "above and beyond" your immediately defined duties. All committee members, not just co-chairs, are encouraged to suggest ways to improve and expand the newsletter.

Another aspect not limited to co-chairs is, of course, the writing and editing experience itself. While any AWIS-SD member is invited to submit articles for the newsletter, Newsletter Committee members are expected to submit at least one article per year. The subsequent editing process then provides the authors with useful feedback about their writing, helping them to hone their craft. Even if you are not a master writer, using the editing service provided by the AWIS-SD newsletter will improve your writing ability, no matter if you are a native speaker or if you speak English as a second language. As editors, the committee members are regularly asked to thoughtfully evaluate others' writing and to provide input both on the grammatical and stylistic level.

Simply writing about a recent AWIS-SD event has benefits. DeeAnn Visk started writing about events that

she had attended. She found it promising to compose an article that compelled her to focus on the material presented at a Strategy Session. Writing an article about the event then reinforced her understanding of the content.

As a co-chair, or co-editor, the curation of other events of interest is up to you. What are other events taking place locally that may be of interest to our members? To assemble an informative events section, you need to stay informed about what is going on in your local scientific and professional communities. Identifying and monitoring the various traditional and social media outlets with the best information about suitable events can be another valuable bit of expertise.

Compiling the newsletter takes a surprising amount of time. All the edits suggested by various committee members must be harmonized and incorporated, and a final version of each article with tracked changes sent to authors for their vetting. The Constant Contact version must be assembled. The content of the newsletter must be posted on the AWIS-SD website, so that Constant Contact can link to the rest of the articles there. (This latter task provides the co-chairs with a taste of using HTML and website editing.)

A PDF version of the newsletter must also be assembled in Word and then saved for the archives. The Newsletter Committee co-chairs have learned quite a number of useful document editing skills that way, such as setting up a self-updating table of contents, preserving features from a Word file when converting into PDF, adding hyperlinks to images, managing document headers across section breaks, and much more.

Therefore, joining the Newsletter Committee will improve your writing and editing skills, your marketing skills, your teamwork skills, and your project management and organizational skills. Let us know if you are ready to join the team: <a href="mailto:newsletter@awissd.org">newsletter@awissd.org</a>

This article is the first of a series about how each individual committee in the Association for Women in Science enables its members to develop skills necessary for the transition to industry.

#### **Science News Ticker**

- UCSD held a hackathon to inspire innovation on October 2, 3, and 4. Students gathered and worked to solve problems using collaborative computer programming. Potential employers were also in attendance, recruiting for internships with plenty of free giveaways.
- According to the journal *Nature*, the University of California San Diego (UCSD) ranks first nationally and fourth in the world in Earth and environmental research. *Nature* based the rankings on the UCSD faculty's contribution to publications in major scientific journals. "This ranking validates our recent strategic planning efforts that identify 'Understanding and Protecting the Planet' as one of four key research themes for UC San Diego," said UCSD Chancellor Pradeep K. Khosla.
- The La Jolla-Riford Branch Library has opened the Life Science Collaboratory, a public biology/biotech laboratory. The Collaboratory offers equipment including microscopes and PCR machines, and forms part of the library's Innovation Space that also includes 3D printers and a 50-person capacity classroom. Access to the laboratory's resources will be supervised by volunteer scientists, who also offer educational workshops, demos, and talks about the life sciences at the site. While other public biotech laboratories exist in the region, such as the Wet Lab in San Diego's East Village area, the Life Science Collaboratory appears to be the first to open in a public library.
- The Scripps Research Institute (TSRI) in La Jolla has appointed Peter G. Schultz, an institute chemist and entrepreneur, to be its Chief Executive, and biologist Steve A. Kay to be its President. Traditionally, one person held these two positions at the institute. However, TSRI's Board of Trustees decided that two leaders were needed to guide the organization, which has struggled with challenges to its financial stability, including a \$21 million annual deficit. The former President and Chief Executive of TSRI, Michael Marletta, was pressured to step down last year after TSRI's faculty rebelled against his controversial plan to have the University of Southern California (USC) acquire TSRI. Schultz is the founder and former Institute Director of the Genomics Institute of the Novartis Research

Foundation (GNF) and the Founding Director of the California Institute for Biomedical Research (CALIBR), a not-for-profit institute focused on early stage translational research. Kay has previously served as Dean of Biological Sciences at UCSD and as Dean of the Dornsife College of Letters, Arts and Sciences at USC. Both have also founded several biotech companies in the past.

- On October 23, 2015, the Carlsbad community biotech center Bio, Tech and Beyond held a public showcase featuring nine out of the 25 companies that had been helped into existence by the local incubator. Representatives from the companies each had just a few minutes to describe organization and its products technologies. Bio, Tech and Beyond offers low-cost lab space and shared equipment to startups and individual inventors looking to launch new biotech companies, and also holds educational events to spread knowledge about biotech. In return, the center leases space at just a nominal cost from the city of Carlsbad, who hopes in turn to benefit from new jobs created by the project. Collaborating with such incubators also offers the promise of access to new partners and technologies to large firms such as the biotechnology product giant Thermo Fisher Scientific, which hosted the public showcase on its grounds.
- UCSD and the City of San Diego will work collaboratively on problems facing urban areas, specifically traffic flow, urban agriculture, and smart infrastructure. This collaboration is under the umbrella of the MetroLab Network, part of the broader White House Smart Cities Initiative to address urban issues nationwide. A number of other cities and universities are working together on similar projects.

#### **Member News**

**DeeAnn Visk**, Ph.D., has a second <u>article</u> published in the biotechnology publication *Genetic Engineering & Biotechnology News (GEN)*. The piece discusses new directions for bioinformatics that go beyond genome crunching.

**Alyson Smith** welcomed a new arrival into her family with the birth of her daughter.



The latest addition to Alyson's family. Photo courtesy of Alyson Smith.

#### **Upcoming Events**

# STRATEGY SESSION: ADVANCE YOUR SUCCESS: ID YOUR STRENGTHS

Are you stuck in your position, wanting to progress, change job, or improve your work efficiency? Then this is the strategy session for you. We will discuss tools to ID your strengths and how to make the most of them. We will also work on identifying and overcoming weaknesses. Join us at the last Strategy Session of the year for a fun and educational strategy session where your strengths will be our focus.

Monday, December 7th, 2015 6:00 - 8:00 pm Hera Hub

4010 Sorrento Valley Blvd, Suite 400, San Diego, CA 92121

Networking: 6:00 pm, Workshop: 6:30 - 8:00 pm Light refreshments will be served. Remember to bring your business cards!

Pre-registration is essential! Please register here.

#### This is an AWIS San Diego MEMBERS ONLY event.

If you are not currently an AWIS San Diego member and would like to attend this event, please join or renew your membership online (<a href="www.awis.org">www.awis.org</a>).

If you register and later discover that you are unable to attend, please notify us by sending an email to StrategySessions@awissd.org.

#### **Local Events of Interest**

#### The Genomics of Brewing Event

Monday, November 30<sup>th</sup> 5:30-8:30pm Green Flash Brewery Tasting Room, 6550 Mira Mesa Boulevard San Diego, 92121

White Labs is now working with Synthetic Genomics and other partners to sequence and characterize the whole genome sequences of 150 Saccharomyces cerevisiae strains used for commercial beer and wine. The primary goal of these studies is to understand the genetics of each strain in order to improve brewing processes and ultimately make better beer. Additionally, the research will serve as a resource for beer brewers, as the data will be shared in a format suitable for wide use. Whether you're a beer brewer or a genomics researcher, this event will be both interesting and useful for you.

Cost: \$25/20 (Academic), \$50 (Recruiters)
Dinner provided; beer and soda available for purchase.
Register at http://sdbn.org/register/

#### French Bio Beach Monthly Breakfast Networking Event

Tuesday, December 1 8:00 - 9:00 am 4901 Morena Boulevard; Suite 501 San Diego, CA 92117

Begin your day, the first Tuesday of every month, with the French BioBeach community to meet new members, network, and enjoy great Starbuck coffee and croissants. Event is free, but registration is encouraged.

#### **About the Authors**



#### Nurith Amitai-Crawford,

Ph.D., has a background in behavioral neuroscience and a strong interest in scientific writing. She currently works as a project manager/scientific writer for the contract research

organization, Absorption Systems. Nurith has been serving as a co-chair for AWIS-SD's Newsletter Committee since 2011. In her spare time, she enjoys swing dancing, card and board games, movies, and archery.



Ksenya Cohen Katsenelson received her Ph.D. Biomedical Sciences from the Technion – Israel Institute of Technology. To further enhance her research career. she relocated to San Diego for a postdoc at UCSD. She has a strong background in signal

transduction pathways, and a broad range of experience in biochemistry and molecular and cell biology techniques. Outside the lab she loves hiking and boogie boarding with her husband and daughter, and enjoys social events with friends.

Anne Kornahrens is a fifth year Ph.D. student in a joint program between The Scripps Research Institute and the University of Oxford. She studies various organic reactions and is working to develop new probes to explore a family of serine hydrolases. In addition to her adventures of co-chairing the AWIS Outreach Committee, she spends time hiking, rock climbing, and scuba diving.



Dr. Robina Shaheen is a project scientist at the Univ. of California San Diego. She enjoys exploring the evolution of planetary atmospheres and conditions that are conducive to the origin of life. It is like being a member of CSI team

where one uses isotopic fingerprinting techniques to establish the origin of tiny space rocks and to find out the condition under which they were formed and traces of any extinct or extant life.



DeeAnn Visk, Ph.D., is a freelance medical writer and editor. She writes a variety of materials including peerreviewed scientific papers, news articles, abstracts, power point presentations,

brochures, white papers, technical notes, web content, case studies, member profiles, and posters. The San Diego, California area is home with her husband, two kids, and one very spoiled hen. You may contact her at deeann.v@cox.net.

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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 November/December Issue: Nurith Amitai, Linda Manza, Pat Rarus, and DeeAnn Visk

#### **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 <a href="mailto:newsletter@awissd.org">newsletter@awissd.org</a>. 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 <a href="mailto:December 10">December 10</a>, 2015

#### I Saw It on LinkedIn

Supriya Gaitonde shared:

Closing the gender gap

Read more...

Join this discussion and many other conversations, or start your own topic by joining the <u>AWIS-SD LinkedIn Group</u>

#### **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 <a href="mailto:fundAWISsd@gmail.com">fundAWISsd@gmail.com</a>

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#### **Important Contacts**

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To contact the Board, visit the following website: <a href="http://www.awissd.org/index.php/about/board">http://www.awissd.org/index.php/about/board</a>

#### **Committee Contacts**

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