

AWIS 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

WINE TASTING!

AWIS Event for March

By Susan Carroll

Join AWIS for a fun and educational wine tasting event on Tuesday, March 13th at 6:30PM, at the Wine Lover. Four wines will be tasted and discussed by a wine educator, and light appetizers will be served. The cost is \$25. The Wine Lover is located on 5th Ave. in Hillcrest, between University and Washington (near the Corvette Diner and the Landmark Theatres). Mark your calendars for this event. Wine knowledge enhances any profession! **Parking:** On the street or in the parking structure for the Landmark Theatres (for a fee.)

January AWIS Event: Tour of San Diego Supercomputer Center

By Marcelle Vogel

In 1985 NSF funded four academic supercomputer centers. Of the original four, only those at UCSD and the University of Illinois remain. San Diego's center is a research unit at UCSD with servers located worldwide. Our tour was preceded by a fascinating glimpse of the types of computing these monster machines can accomplish, from computer modeling, molecular computations, and bioinformatics to 3D imaging, tracking of seismic activity, and much more. A key advantage of the Center is its ability to integrate research tools into new applications for scientific discovery, which is a vital part of the Center's mission.

The Center strongly supports scientific education and women in science, and is a member of Women in Computing Research and NPACI - the National Partnership for Advanced Computational Infrastructure. The Center also hosts the AWIS Chapter Website.

AWIS Members on the Move.....

Susan Carroll, PhD has joined Nanogen.

Tobey Tam, PhD has joined the Supercomputer Center as a post-doctoral fellow.

Laura Waggner, PhD has joined the Scripps Institute of Oceanography as a post-doctoral fellow.

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AWIS Outreach Committee News

Volunteers Needed!

By Anna-Maria Hays

The Outreach/Scholarship Committee strives to maintain close interactions with schools and other organizations. The goal of our Speaker's Bureau is to bring women scientists into the classroom to provide information about careers in science, topical research, and to provide an alternative image of scientists. In addition, we are currently designing various science kits for hands-on experiments for speakers to bring to classrooms for elementary, middle, and high school levels as well as information sheets regarding science and career opportunities. We have had two very successful and exciting Science/Career Day events with Sweetwater High School and the Girl Scouts. We are actively searching for additional volunteers to not only help with upcoming events but also provide input into the educational kit design process.

The Committee is also currently in the process of receiving many applications for the San Diego AWIS Chapter Scholarship in Science and Engineering. This scholarship recognizes the achievements of community college, undergraduate, and graduate students pursuing careers in science.

The Outreach Committee also gives AWIS members the opportunity to interact with other science organizations. On March 28th 2001, AWIS volunteers will be able to judge numerous projects in the Greater San Diego Science and Engineering Fair. Furthermore, on March 30th and May 11th AWIS members will be able to help as chaperones and design workshops for BeWise (Better Education for Women in Science and Engineering) educational overnight workshops for 7th and 8th grade girls.

The committee also plans to develop an internal AWIS mentoring program. We will compile a database of AWIS members so those members can network and mentor one another in career development.

The Outreach Committee will continue to put forth effort for science education and interaction with the community. We strongly encourage all members to volunteer, either to participate in our exciting programs or to offer your services for specific events. We are in need of volunteers!!! If you would like to know more about our endeavors, please feel free to contact Anna-Maria Hays, Ph.D., Outreach/Scholarship Committee Chair (email: haysam@scripps.edu, or phone 858-784-2425).

San Diego Chapter Welcomes the Following New Members:

Katherine Bowdish	Alexion Antibody Technologies
Rita Lim	The Scripps Research Institute
Marsha Jean MacDonald	

AWIS Publicity Committee is Seeking Members

By Vickie Tsui

The Publicity Committee is having an organizational meeting on Wednesday, February 21st at 6 PM at the Beckman 3rd floor conference room of the Scripps Research Institute. This will be an introductory meeting for AWIS members who are interested in joining the Publicity Committee, whose main purpose is to increase the local community's awareness of our AWIS chapter. The meeting is very informal, and should last between 30 minutes to an hour.

If you have any questions, please contact Vickie Tsui at vtsui@scripps.edu or (858) 603-8010. Detailed directions to the meeting location are available at <http://www.scripps.edu/~vtsui/awispublicity.html>.

AWIS San Diego Women in Bioscience Conference Taking the Lead

By WIB Publicity Committee

Take the lead and join fellow AWIS members for the Women in Bioscience Conference at the Salk Institute, on May 5, 2001. With workshops such as "Negotiation Skills," "Leadership in Academia vs. Industry" and "BioInformatics" and a maximum capacity of 350 registrants, this conference fosters an environment of interactive participation. You can look forward to a dynamic session with internationally acclaimed keynote speaker, Dr. Rita Colwell, Director of the National Science Foundation. Special guest speakers Fran Heller, J.D., Dr. Susan Haber, and Carol LeBeau will also offer their diverse perspectives on leadership, entrepreneurship and mentoring. Historically, the WIB conference has focussed on networking and educational opportunities for women scientists. The upcoming WIB conference is the fifth in a series that has been specifically designed for attendees to explore issues such as "How to be a Boss," "Your Stay or Leave Equation," and "Saving & Managing Money." For more information, contact the San Diego AWIS chapter website, <http://awis.npaci.edu/WIB> or call the AWIS hotline at 619-687-5580. Online registration begins Feb 15, 2001.

AWIS Events Committee Schedule of Events for 2001

By Marcelle Vogel

Mar 13th - Wine Tasting at the Wine Lover
April 11th - The Changing Role of Forensics as seen by the FBI
May - WIB Conference

Subscribe to the AWIS E-mail list (free)

The AWIS e-mail list will keep you up-to-date with news of job opportunities, AWIS news and events (between newsletters.) To subscribe, please send e-mail to sdawis@san.rr.com. Include your full name, address, and phone number.

Historical Profile: Ellen Swallow Richards

By Cathy Manner

"The quality of life depends on the ability of society to teach its members how to live in harmony with their environment – defined first as the family, then with the community, then with the world and its resources." – Ellen Swallow Richards

Throughout her distinguished career, Ellen Swallow Richards made many impressive contributions to the fields of chemistry and mineralogy. Although she could have easily confined herself to the academic sphere, she instead chose to use her scientific knowledge for the public good. In addition to being a lifelong advocate for increased educational opportunities for women, she was also a pioneer in the fields of ecology, environmental science, public health and home economics.

Richards was born Ellen Henrietta Swallow in Massachusetts in 1842. As the child of teachers, she was educated primarily at home, where she helped care for her ill mother. Despite her lack of formal education, she was accepted to Vassar College in 1868. There she completed a four-year curriculum in two years and received a bachelor's degree in 1870. The following year she entered the Massachusetts Institute of Technology (MIT) as the school's first female student, and in 1873 she became the first woman in the U.S. to earn a BS in chemistry. She was also awarded an MS degree in chemistry from Vassar the same year. Richards continued to study at MIT until 1875, but she was denied a doctorate because her professors did not want the first Ph.D. in chemistry at MIT to be awarded to a woman.

Despite this slight by the MIT faculty, Richards continued her association with the university for the remainder of her highly successful career. She was elected the first female member of the American Institute of Mining and Metallurgical Engineers for her work on the chemistry of ore analysis (work done jointly with her husband, MIT professor Robert Richards). She discovered samarskite, a rare ore, and isolated the element vanadium. Richards also analyzed Massachusetts' water supplies and sewage for the Board of Health, earning herself an international reputation as a water scientist.

Her dedication to research was matched by her strong commitment to education for women. In 1876 she opened the Women's Laboratory at MIT, where she taught chemistry, biology, and mineralogy and encouraged her students to pursue careers in science. She also co-founded the Association of Collegiate Alumnae, which later became the American Association of University Women.

After teaching without pay for several years, Richards was finally awarded her first salaried faculty appointment at MIT in 1884. Her new position, in the laboratory of sanitation chemistry, allowed her to use her training to improve public health. She tested home furnishings and foods for the presence of toxic chemicals, investigated water pollution through her work with the Board of Health, and helped to design safe and efficient sewage systems. Her foresighted advocacy of good sanitation and the protection of the environment were controversial at the time. Richards was also instrumental in opening the New England Kitchen in Boston, which provided meals for poor families as well as instruction in proper nutrition and food preparation. As one of the first scientists to apply the principles of biology and chemistry to domestic life, she is considered the founder of home economics.

In recognition of her accomplishments within academia and in the community, Smith College awarded Richards the honorary degree of Doctor of Science in 1910. She died the following year

of heart disease, having laid the foundation for the modern fields of ecology, public health, dietetics, and home economics.

*****Nanogen Job Posting*****

We have a job listing at Nanogen in our group. If interested, please send your resume to jbell@nanogen.com.

The second position is for another recently posted open position with another group at Nanogen.

Research Scientist - 122

Description:

Seeking a Research Scientist for the development of alternative DNA amplification protocols and their application to Nanogen's electronic array technology. This individual will be required to interact with other molecular biologists and engineers for new product development. This individual must be capable of working independently, provide novel assay protocols and possess good communication skills.

Qualifications:

Ph.D. 2+ years experience preferred. The candidate must be familiar with DNA amplification protocols and preferably, with amplification protocols that are alternative to polymerase chain reaction (PCR). In addition, the candidate should be familiar with DNA biochemistry, the design of DNA microarrays and knowledgeable in the area of biochemistry. Other experience such as protein chemistry or enzyme kinetics is preferable, but not necessary.

Research Scientist - 009

Description:

Seeking a Research Scientist to design major experiments; evaluate test data, prepare associated paperwork for segment of the total research plan; conduct and write interpretive literature reviews for future project ideas.

Qualifications:

Ph.D. in a scientific discipline and 0-2 years' experience in related scientific research or development. Demonstrates potential for technical proficiency, scientific creativity, collaboration with others and independent thought. Candidate must have experience with optimization of DNA polymerase systems and enzyme kinetics. Product development experience is a plus.

MSI International JOB POSTINGS

Director of Intellectual Property

Be in charge of the intellectual portfolio of an expanding San Diego Biomed company with product in late stage clinical testing. With the mentoring of a knowledgeable, well-respected GC, you will be involved in patent prep and prosecution as well as licensing agreements and collaborations. This is an excellent opportunity to expand the value of your IP background by contributing to negotiations and legal strategies for licensing, research and other business endeavors. To be considered, you must be very current & strong on the strategic aspects of patent activity in the biomedical field. Hands-on ability to draft and prosecute patents is required. Skills as a proven writer with previous law review experience or a well-published writer are strongly desired. Must be strong scientifically & able to review scientific papers, press releases, and help position the company to maximize the patent portfolio. The position requires at least 4 years of experience in all aspects of U.S. and foreign IP law relating to biotechnology. The position requires a JD degree, admission to practice before CA. state bar and PTO certification.

Director of Clinical Operations

A stellar opportunity for a clinical professional to expand his/her operations expertise directing studies in a variety of therapeutic areas. Oncology, pain management, and CNS programs are currently under clinical development and more may be coming out of pre-clinical evaluation. If you are an organized, detail-oriented professional who likes to make sure that things move along according to plan, you will have the opportunity to oversee in-house CRAs and CROs, establish time lines and budgets, negotiate contracts—in effect, take charge in planning and implementing successful clinical programs. You will report directly to the VP Med./ Clinical Affairs. You should have experience making clinical programs operate effectively and smoothly. You must know the nuts and bolts of clinical trials, be proactive with studies, and know what should be happening when. You will enjoy the supportive environment at this San Diego based company. In addition, the domestic and international knowledge you gain, plus experience with a variety of clinical approaches will provide leverage for career advancement.

Corporate Attorney

Solid, well-established San Diego based company is seeking a Corporate Attorney to play a key role in negotiating, drafting and analyzing collaborations and partnerships, research/manufacturing agreements, contracts, etc. You will be a liaison with outside counsel on various legal issues. Close communication and interaction with senior management and other internal departments will be necessary. A JD degree with 5-10 years transactional experience in a major law firm or with a biotech or pharmaceutical company is needed.

Vice President-Chemistry (Bay Area)

A pre-IPO pharmaceutical company is seeking a Vice President of Chemistry with high intellectual and creative capacity to provide leadership in expanding their discovery and development activities, focusing on both pharmaceutical and nutrition programs. As VP you will participate in strategic planning at the corporate level. This position will involve constant interaction with counterpart senior managers and with the CEO. An advanced degree in chemistry is required. Must have a minimum of 10 years of progressive achievement in the pharmaceutical industry. Excellent communication skills and executive impact coupled with strong analytical ability is desired. Must have proven leadership and mentoring skills.

BS/MS Biomedical or Mechanical Engineer (Southern Calif)

The best of both worlds—a company small enough for you to play a significant and influential role in product development and have the financial backing of a major international corporation. A biomedical or mechanical engineer experienced in fluidic devices or micro-fluidic instrumentation would be a valued contributor. Must have BS/MS degree with at least 2 years in industry. More experienced engineers are also welcome to apply.

Ph.D. Chemist (Southern Calif)

There is an exciting opportunity for a strong synthetic organic chemist to make the transition straight from academia to cutting-edge science in industry. If you have excellent skills synthesizing complex organic molecules, you can build flexibility into your career by applying those talents while learning material and electrochemistry. Working in a scientifically stimulating, interactive group you will develop substances unique to the field and benefit from the financial resources of a large, international corporation. Postdoctoral experience or industry experience NOT required.

BS/MS Cell Culture Scientist (Southern Calif)

Large, stable international biotech company in Southern California is seeking a BS/MS scientist with mammalian cell culture skills to be a key contributor. As part of a team interacting with all discovery areas, you will express variety of proteins as actual therapeutics or disease targets. To be considered you should be very knowledgeable in cell culture, transient and stable protein expression, and have some hands-on experience in protein assessment (Western blots, ELISAs, etc.). Some basic molecular biology skills (cloning, PCR, etc...) and CHO cell work would be a plus. Benefits of the company include strong financial stability, valuable stock options, career advancement and flexibility, on-site day care, chefs, fitness centers and much more.

MS or PhD Immunology Scientist (*in vitro* or *in vivo*) (Bay Area)

An excellent chance to transition into industry or advance in your industry career. Be a key player in experimental biology establishing new animal models for inflammation and/or oxidative stress activity.

For the *in vivo* scientist position, an MS+5 or more years experience or a PhD with experience designing and conducting animal model studies of either inflammation, oxidative stress or metabolic disease and evaluating pharmacological agents in such models is necessary. One would have independently performed rodent surgical technique including anesthesia/intubation, vessel isolation/cannulation, plus tissue sampling, animal recovery and chronic physiological monitoring.

The *in vitro* scientist will develop cell-based assays in conjunction with discovery teams and must have a MS/Ph.D. in a Biological Science, at least 2-3 years experience in industry and/or academia working with inflammatory pathways in relevant cells. Extensive experience with cell lines or primary cells in culture to develop cell-based assays is required. Knowledge and experience with oxidative stress/metabolic impairment would be a plus.

To apply for any of these positions or to receive more information, please contact Dr. Barbara Coleman at MSI International at (858) 546-2890 or via e-mail at bc Coleman@n2.net

IMPORTANT INFORMATION ABOUT**San Diego Chapter**

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About the AWIS Newsletter

The AWIS Newsletter is published bimonthly and provides AWIS members and supporters with information on chapter activities, career developments, and issues related to women in science. The newsletter is free to AWIS members. Subscription rate for non-members is \$20 a year.

Mar./Apr. Newsletter staff:

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Cathy Manner Barbara Armstrong Christine Haws

Send news items, comments, and subscription requests to Barbara Armstrong via e-mail: baawis@nethere.com; or AWIS, PO Box 178096, San Diego, CA 92177-8096. If you would like your article included in the next issue, the deadline for inclusion is April 6, 2001.

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Posting Jobs in the AWIS newsletter: Contact Elaine Weidenhammer at eweiden@hotmail.com, or AWIS voicemail: 619-687-5580, or AWIS PO Box: 178096, San Diego, CA 92177-8096 for the details. Deadline for inclusion in the next AWIS newsletter is April 6, 2001. If submitting by snail mail, include the words ATTN: Elaine Weidenhammer on the bottom left corner of the envelope.

Moving? Address Change?