

Education Outreach Committee Wants you!

by Barbara Armstrong

The San Diego AWIS Education Outreach Committee will hold an organizing meeting at 6:30 p.m. on Tues., June 17, at La Jolla Country Day School. The committee runs a number of programs, including:

- Speakers Bureau -- Provides women scientists as speakers to science classes

- Curriculum Development Committee -- Designs simple, low-cost, hands-on experiments for classroom use. Our hands-on experiments have been presented at the San Diego Science Educator's Conference, and at "Science Day" events organized by local schools.

- Science Olympiad Coaches -- Assist the Roosevelt Jr. High School Science Olympiad team.

Any level of participation would be appreciated. Please contact Barbara Armstrong at Barbara_Armstrong@sequana.com or leave a voice message on 646-8346 if you have questions or plan to attend.

Visit our WEB page

San Diego AWIS now has its own WEB page. The page contains general AWIS information, membership information, information about the AWIS Education Outreach committee, links to other AWIS sites, and chat forums for your comments about our programs, etc. Look for us at: <http://www.ljcds.pvt.k12.ca.us/awis/>

San Diego AWIS is grateful to La Jolla Country Day School and Science teacher Gloria Friedgen for donating space on their internet server and WEBmaster (student, Nicholas Shiftan.)

Volunteer Needed!

AWIS National has received a request from SPIE --The International Society for Optical Engineering -- to have an AWIS

member serve on a panel at their annual symposium in San Diego the last week of July. The panel: Careers for Women in Optical Science and Engineering -- focuses on several areas covered by your recent BioScience conference and similar conference of AWIS.

If you are an AWIS member in the San Diego area who would like to serve on this panel, or have any questions please contact Laura Capuco, capuco@awis.org, 202-236-8940.

Batters Up!!

by Denise Hickey

The game will be July 27 at 1:05 pm against the N.Y. Giants. AWIS members \$20 each (limit 2), non members \$30 each. There are ONLY 25 tickets available at the reduced price of \$20, and these will be sold on a first paid basis. All tickets must be paid for IN ADVANCE and must be post-marked no later than June 30th. Mail checks, made out to AWIS, to AWIS/San Diego, P.O. Box 178096, San Diego, CA 92177-8096.

Price includes admission to the game and all-you-can-eat buffet.

Rave Reviews for "WOMEN IN BIOSCIENCE III"

by Joanne Mullen

A proclamation from Mayor Susan Golding, announcing Saturday, May 3, 1997 as "Women in Bioscience Day" set the tone for AWIS-San Diego's "Women in Bioscience III" conference, held at the Salk Institute in La Jolla.

Networking was the operative word for this year's exciting, sell-out event, entitled "Making Connections". Over 360 professional women had the opportunity to learn about the intricacies of interfacing academia and industry from notable plenary speakers, such as Dr. Alice B.

Hayes, President of the University of San Diego, Dr. Tina Nova, President and COO of Nanogen, Inc. and special guest, Catherine Didion, Executive Director of National AWIS.

The afternoon workshops provided a dynamic environment of interactive dialogue, covering diverse topics which included business development, entrepreneurship, research opportunities and professional career development. A special workshop on mentoring highlighted AWIS-San Diego's community outreach programs on science education at the grade-school level.

"Women in Bioscience III", co-sponsored by UCSD CONNECT and BIOCOM/San Diego, showcased the achievements of a number of San Diego women scientists, as well as the positive role models of local women in bioscience. One such woman of influence and vision was especially recognized for her long-time, active involvement with the AWIS-San Diego chapter. Lynne Friedmann, chairperson of the first "Women in Bioscience" conference, was presented with the 1997 National AWIS Fellow award by last year's recipient, Dr. Pam Surko of Science Applications International Corporation (SAIC).

The quality and success of "Making Connections" was largely due to the corporate sponsorship from 34 bioscience companies, as well as the hospitality of the Salk Institute and the dedicated work of the event's organizing committee and co-chairpersons, Shirley Johnson and Ann Lee.

GWIS Symposium on June 21, 1997

by Grace Nakayama, President GWIS Tau Chapter

The Tau Chapter of Graduate Women in Science (GWIS) is sponsoring a public symposium on Saturday, June 21, 1997 at the

University of San Diego as part of the GWIS National Meeting. The symposium will be an all-day event with the general theme of "Surfing Science: The Next Quarter Century." We are planning to hold two panel discussions during the day. The first is entitled "Breakthroughs in Science and Technology" and features Rozeanne Steckler (SD Supercomputer Center), Tammy Dwyer (USD), H. Jane Dyson (Scripps), Elizabeth Komives (UCSD). The second is "New Waves in Health and Education" and features Gail Naughton (Advanced Tissue Sciences), Paula Tanner (Registered Environmental Health Specialist), Barbara Sawrey (UCSD) and Cheryl Rock (UCSD). In addition, there will be a workshop on the GWIS interactive discussion group by Sheri Cole, who started it several years ago and serves as the moderator.

During the evening, there will be a banquet featuring a talk by Dr. Rosemarie Johnson on "Women Physicians: Our history propels us into future prominence." The award for "Outstanding Woman Science Teacher" will be presented at this time. The fees are: \$25 for the "Surfing Science" symposium and \$35 for the banquet. Continental breakfast (sponsored by AWIS) and lunch are included. Preregistration is required. For a brochure, please contact Penny Perkins at 538-2288 or psperkins@aol.com. For more information, contact Pat Shaffer at 260-4034 or shaffer@pwa.acusd.edu

National Academy of Sciences Elects New Members

The National Academy of Sciences has announced the election of 60 new members; 6 of whom are women. They are:

ATWATER, TANYA M.; professor of geological sciences, University of California, Santa Barbara

BAHCALL, NETA A.; professor of astrophysical sciences, department of astrophysical sciences, Princeton University

CEYER, SYLVIA T.; John C. Sheehan Professor of Chemistry, Massachusetts Institute of Technology, Cambridge

LINDQUIST, SUSAN L.; investigator, Howard Hughes Medical Institute; and professor of molecular genetics and cell biology, department of molecular genetics and cell biology, University of Chicago

MARCUS, JOYCE; professor of anthropology, Museum of Anthropology, University of Michigan, Ann Arbor

RANDALL, LINDA L.; professor of biochemistry, department of biochemistry and biophysics, Washington State University, Pullman

[For a complete listing of new members, see the news release available on the World Wide Web at: www.nas.edu/new]

Greater San Diego Science and Engineering Fair AWIS Winners

Congratulations to the following young women who's projects were selected as AWIS 1997 winners:

SENIOR HIGH

- Leah Ortiz Barrera

"Persistence of Sample Algal Populations in Used Motor Oil"

- Jennifer Faye Schjolberg

"EMF and Sea Urchin Embryo Development"

JUNIOR HIGH

- Katherine Outland

"Is the Preferred Insulation Really the Best?"

- Kerry Kelly-Cochrane

"Marker and Drink Mix Colors: More Than Meets the Eye"

Keep up the great work!

Special Thanks!

AWIS would like to acknowledge the following corporate sponsors and committee members who made the Women's Bioconference III a success!

CORPORATE SPONSORS

PLATINUM (\$1000)

- Amgen, Inc.
- San Diego Biotechnology Calendar
- Trega Biosciences, Inc. (formerly Houghten Pharmaceuticals, Inc.)

GOLD (\$750)

- DepoTech Corporation
- Quintiles Pacific, Inc.

SILVER (\$500)

- Advanced Tissue Sciences, Inc.
- Alliance Pharmaceutical Corp.
- Canji, Inc.
- Chiron Technologies, Center for Gene Therapy
- Collateral Therapeutics, Inc.
- Genetronics, Inc.
- Gen-Probe, Inc.
- Hybritech, Inc.
- Isis Pharmaceuticals, Inc.
- Lyon & Lyon LLP
- Mycogen Corporation
- PharMingen
- Science Applications International Corporation (SAIC)
- The Scripps Research Institute
- Signal Pharmaceuticals, Inc.

BRONZE (\$250)

- Aurora Biosciences Corp.
- Calbiochem-Novabiochem Corp.
- Combichem, Inc.
- Friedmann Communications
- McKinsey & Company

SPONSOR (\$100-150)

- Biomedical Testing Services
- The Canadian Consulate Trade Office - San Diego
- Irori Quantum Microchemistry
- Lauren Ferguson
- Nanogen, Inc.
- Pharmacology Education Research Foundation
- Protein Polymer Technologies, Inc.
- UCSD Extended Studies and Public Programs
- UCSD Technology Transfer

ORGANIZING COMMITTEE MEMBERS

CONFERENCE CO-CHAIRS

- SHIRLEY JOHNSON, Ph.D.
- ANN A. LEE, Ph.D.

PUBLICITY COMMITTEE

- Committee Head: MARCELLE MILLER-VOGEL
- LOIS BONCER, M.S.
- SARA J. HOOTEN
- JOANNE M. MULLEN, R.N., B.A.
- SUSAN PENA, Ph.D.
- ELINOR WILLIAMS

FUNDRAISING COMMITTEE

- Committee Head: ROBIN SMITH, R.N., B.S.N.
- GRAI ANDREASON, Ph.D.
- LUCIE BRUIJN, Ph.D.
- HUI SUN KIM

SPEAKERS COMMITTEE

- Committee Head: ISABEL CORCOS, Ph.D.
- EILEEN COLLINS TOZER, Ph.D.
- BENTE HANSEN, Ph.D.
- MAUREEN POWERS, Ph.D.

PUBLICATIONS COMMITTEE

- Committee Head: SANDRA PARSONS
- IDA DEICHAITE, Ph.D.
- ANN MARIE GALLAGHER, M.S.
- NIKOU A. HESSAMI, D.V.M., Ph.D.
- KAREN MAY-NEWMAN, Ph.D.
- TINA J. PATEL, M.S.
- KATHLEEN E. WAGNER, R.N., B.S.N.

FACILITIES COMMITTEE

- Committee Head: KRISTINE KUUS-REICHEL, Ph.D.
- ANDRIA LEE

NASA Summer Faculty Fellow, Part I

by Sue Lowery

AWIS member, Sue Lowery will be spending the summer at NASA in the Ames Research Center at Mountain View, CA, as a NASA Summer Faculty Fellow. Sue will be working in the life sciences

division investigating the otolith-spinal reflex in the rat. This is one of the mechanisms by which organisms can "sense" gravity. Sue will be working in the laboratory of Dr. Nancy Dauntton.

Look for a future article in the AWIS Newsletter, "NASA Summer Faculty Fellow, Part II" summarizing Sue's summer at NASA.

Spreading the Word About the Value of Women in the Workplace

(and getting our name out at the same time!)

by Denise Hickey

On April 25, the San Diego chapter of AWIS (along with Coopers & Lybrand) co-sponsored a conference, presented by the Athena organization of CONNECT, that was entitled "Building Capital Through Women: A Competitive Organizational Strategy".

For those of you not familiar with these organizations, UCSD CONNECT is dedicated to facilitating the transfer of knowledge (and people) between academia and industry, particular in the high-technology areas. Athena was established by UCSD CONNECT to facilitate networking opportunities among senior women executives at CONNECT member and sponsor companies and to address the business issues that women in senior management roles confront.

This was the first time that our chapter has co-sponsored such an event, and I'm pleased to say it was a big success! The featured speaker of the conference was Dr. Judy B. Rosener, professor in the U.C. Irvine Graduate School of Management and author of "America's Competitive Secret: Utilizing Women as a Management Strategy." She was not only an engaging speaker, but a motivating one. As an organizing theme for

her keynote address and the following small group discussions, Dr. Rosener used the theories, developed in her book, concerning the five organizational stages that companies, organizations and service firms go through as they address the issue of female underutilization. These five stages are: 1) Staying out of trouble; 2) We need to react; 3) It's a case of survival; 4) It's the right thing to do; and 5) It's part of our culture.

In her keynote address, Dr. Rosener discussed some of the differences between "men" and "women" with respect to their behaviors, assumptions and values in the workplace. She made the point of clarifying that the attributes she generalized to "men" or "women" are by no means exclusively male or female, but are so identified for the sake of discussion. With that in mind, Dr. Rosener pointed out that men are socialized to view things as win or lose, right or wrong, whereas women are socialized to view things in a more "gray" manner. This socialization of men results, among other things, in the "assimilation model" found in the workplace. Under this model, characteristics that are "different" from the characteristics of those in power, must be either better or worse than the power characteristics. Since the power characteristics have already been proven to be good, the "different" characteristics must be bad. Naturally, this is an oversimplification of the problem, but it provides a good basis for discussion. While Dr. Rosener did not have time to discuss the biological factors that contribute to the behavioral differences between men and women, she does consider them relevant and discusses them in her book.

After the keynote address, which included an explanation of the five organizational stages experienced in addressing female underutilization, the conference participants "self-diagnosed" their companies. Each individual joined

one of five discussion groups, each group representing a different organizational stage, to discuss why they thought their company was at that particular stage, how the company got to that stage and what it would take to push the company to the next stage. Much to Dr. Rosener's surprise, a large number of people went to stages 4 and 5 (the two most advanced stages of recognizing and remedying the underutilization of women). In the large group discussion that followed the break out session, it was discovered that most of the people in these two groups were employees, managers or owners of small companies and that these types of companies make up a significant percentage of the high-tech companies in San Diego. Dr. Rosener explained that such small companies cannot afford to underutilize anyone, so they tend to be more progressive on this issue.

Following the large group discussion, Dr. Irwin Jacobs, founder, Chairperson and CEO of Qualcomm, Inc. and Linda Noda-Hobbs, Esq., President of the National Dispatch Center, Inc., joined Dr. Rosener in a panel discussion of the issues raised during the large group discussion. This too was an interesting dialogue, as Dr. Jacobs, whose company recently completed an internal survey that indicated no significant disparity between the male and female employees' satisfaction with their employment situation, brought a male perspective that, while not stereotypical, still resonated with some of the prejudices identified by Dr. Rosener in her keynote address. Additionally, Ms. Noda-Hobbs provided insight as a female executive of Japanese descent, thereby bringing gender and race issues to the discussion. Relaying an anecdote from her climb up the corporate ladder, Ms. Noda-Hobbs described how a Japanese company had hired her for an upper management position because she was a lawyer with business

experience who spoke fluent Japanese. She stated that they clearly would have preferred a man for her position, but had to settle for the best person available...a woman.

The conference closed with a luncheon, which was well attended by the participants (too often people leave early and skip the luncheon). The high luncheon attendance was particularly good for our organization, as we were able to make a "plug" for ourselves. Because Athena did such a good job with the conference, we reaped the benefits of being associated with it (and them), despite our having to do no work whatsoever. This event, combined with the outstanding "Women in Bioscience" Conference, which was completely organized by Shirley Johnson, Ann Lee and their fabulous committee, has helped the San Diego chapter of AWIS gain the local recognition it needs to provide more effective networking opportunities and support to its membership. Athena will be hosting another conference in the fall (topic as yet undecided) and has asked for our input in coordinating it. I encourage all of you to consider attending the conference. The women and men involved in Athena and UCSD CONNECT are the movers and shakers of the San Diego high technology industry and, as such, have a great deal of experience and know-how to share. We'll let you know when and where the next conference is, so keep reading your newsletters!!

Noted Educator and Author Visits San Diego.

by Barbara Armstrong

On April 15, National University hosted a San Diego appearance by Shelia Tobias, author of "Overcoming Math Anxiety." Tobias described how, as associate provost of a newly coeducational

Wesleyan College, she came to realize that 60% of women students experiencing difficulty with mathematics did not have an intellectual deficiency but rather were having problems due to "anxiety" about mathematics.

In the newly revised edition of "Overcoming Math Anxiety," Tobias cites *National University's Frances Rosamond as addressing the anxiety of students in her teaching methods and facilitating learning of math. Tobias' research in math anxiety has influenced writing in math and science texts: a calculus text by Hallet and Gleason and a Physics text by Eric Maseur.

Tobias' text on the teaching of science "They're not dumb, they are different" tells of the experiences of seven non-science graduate students in science classes. Since science is not a required subject for most students, they don't experience "science anxiety" they experience "science avoidance." The underlying message of the book is to inform science educators that anyone can learn science if it is presented properly. Science educators and scientists have themselves to blame for the underfunding of science research and education. Noting that only one member of President Clinton's cabinet studied science, Tobias makes the sobering observation that "the same individuals who were shut out of science are now making (our) national spending policy."

Tobias is also the author of "Faces of Feminism -- An Activist's Reflections of the Women's Movement," available from Westview Press.

About the AWIS Newsletter

The AWIS Newsletter is published bimonthly.

Editor Sharon Cherf

Co-Editors Barbara Armstrong

Send news items to Sharon Cherf, 6455 Lusk Blvd, Q-243M, San Diego, CA 92121. If you would like your article to be included in the next issue, please send your items in by July 15, 1997. For AWIS membership information call the AWIS voice mail line at 619-687-5580.