

Microbicides: Giving People Power Over AIDS

by Amy Beliveau

WEDNESDAY, OCTOBER 19, 6:30 pm

This presentation offers a brief look at the AIDS crisis followed by an in-depth discussion of microbicides: what are microbicides; how and where will they will be used; why are they important; when will they be available; and what are the political and economic challenges impacting the research and development of microbicides.

Amy is a public affairs coordinator for Planned Parenthood Public Policy Network of Washington. She has organized local and statewide advocacy campaigns in support of international family planning and was the coordinator for the Planet Northwest campaign from 2002-2004. She is currently working on a statewide education and mobilization campaign to protect federal and state funding for family planning services. She has been a member of the Northwest Microbicide Coalition since 2002. She has worked at NGO's in the United States and New Zealand on reproductive rights and ending violence against women for the past 7 years. Amy received her Master of Public Health degree from the University of Auckland, New Zealand, and her BA from Williams College in Massachusetts.

Agenda

6:30 Networking and Refreshments

7:00 Presentation

8:00 Wrap-up and Networking

Where

Fred Hutchinson
Cancer Research Center
Day Campus
Weintraub Building B1-072/B1-074
1100 Fairview Ave North
Seattle, WA 98109

Scholarship Committee

by Fran Solomon

On September 14, the Scholarship Committee had the pleasure of presenting scholarships to ten outstanding future scientists. We wish all of the scholarship winners a stimulating, happy, and productive school year and invite you to attend upcoming AWIS meetings as your schedules permit.

The Scholarship Committee is currently updating the application form. The 2006 application will be posted on the Seattle AWIS website (www.scn.org/awis) by the end of October.

Biographical profiles of three of this year's scholarship winners were presented in the September newsletter. Two more winners are featured below; the others will be featured in the November and December issues of this newsletter.

Elizabeth Padilla

Elizabeth is a dental assistant who continued her education while raising three children largely on her own. (Her husband serves in the U.S. military and has had several overseas assignments.) She received the Biology Student of the Year Award in 2004 at Pierce College in Tacoma and was elected to Phi Theta Kappa, the honorary society based on academic achievement. She is also a skilled swimmer, bicyclist, and runner, and completed a triathlon in Honolulu. After receiving her Associate in Arts and Science and Associate in Science degrees, Elizabeth enrolled in Pacific Lutheran University where she is now a senior majoring in biology and minoring in chemistry. Elizabeth looks forward to attending dental school and is enthusiastic about her future career as a dentist. She is providing a good example for her children that all things worthwhile are obtained through hard work and a belief in oneself.

Julie Parrott

Julie combined her interests in human biology and ecology to craft a major in environmental biology at Seattle Pacific University, where she is now a senior. This past summer, she conducted a research project on algal bloom source tracking in the waters of South Bainbridge Island. Julie enjoys both learning about science and teaching science to others. She currently mentors high school girls and has been a volunteer with Expanding Your Horizons, a program that exposes teenage girls to science careers and female role models. This year, Julie will continue to be a Teaching Assistant for an Anatomy and Physiology class at Seattle Pacific University. She feels great joy when her students "get it" and looks forward to earning a Master of Arts in Teaching at the University of Washington and pursuing a career as a high school science teacher. She is especially interested in inspiring girls to become scientists.

September AWIS Program: Scholarships and Gender and Technology in Education

On September 14, the Seattle AWIS chapter had its first meeting of the 2005-2006 year. The year kicked off with the presentation of 10 scholarships to junior and senior undergraduates studying in a variety of science fields.

After the scholarship presentations, Jo Sanders discussed her recent work reviewing research on gender and technology. She began with an overview of the development of computer science and technology as a field and the growing disparity between males and females studying technology.

Ms. Sanders identified five areas that have influenced this trend. Society influences girls in particular to have gender-stereotyped interests. Age, stage, and pipeline also affect this trend. Differences between males and females are seen as early as preschool aged children but the differences are exaggerated as children age.

Experience, attitudes, and use patterns were the third areas Ms. Sanders explored. She reported that a positive attitude toward technology was associated with masculinity in both males and females, and femininity was associated with a more negative attitude. The classroom experience can also shape whether a girl is interested in pursuing the computer science field. Here, she explained how the

“stereotype threat” can cause women to perform worse, especially in public or in the presence of males, on computer tasks. The “stereotype threat” is anxiety people feel when they are in an evaluative context when they identify with a group that is traditionally stereotyped, such as women. Finally, there are some positive special efforts that are underway in many areas to counteract these effects. However, these efforts are not universal and only are occurring on a small scale.

There are still many unanswered questions in this field as to why the disparity occurs and what can be done about it. For more information, I would encourage you to visit Jo Sanders website:
www.josanders.com

Mentoring

by Becky Klein

What is a mentor? A friend? An advisor? Someone whose opinion you value and trust and therefore seek out for advice? If you pose this question to a roomful of people you will get a range of answers, but all will encompass the qualities mentioned above. With a description like this it is little wonder that so many professionals attribute some part of their career successes to the guidance and advice of their mentors. Often good mentoring, or the lack of it, can have a tremendous impact on one's career.

Many of us can identify the mentor that first encouraged our interest in science. Numerous studies of mentoring in science have shown that good mentoring leads to happy and productive scientists and, for women, improves their chances for success. For example, a study by Gardiner *et al.* (1999) examined the effects of mentoring over a seven-year period in academic settings and found substantial benefits of mentoring for both the mentored individual as well as for their institution. In particular, women who were mentored produced one and a half times as many high quality publications, had a higher rate of promotion and received over four times the grant income of those not in the mentoring program. Similarly Jackson *et al.* (2003) found that mentors were especially important in teaching mentees the 'rules of the game' of academic politics and networking and how to promote themselves. Perhaps most importantly, participants in the study without mentors, reported that by the time they figured out these 'rules' on their own, "it was too late."

Mentoring girls and young women in Science, Engineering, and Math (SEM)

These findings have resulted in a multitude of mentoring programs at the pre-college and undergraduate levels, including the GEMS and WISE (Women in Science and Engineering) programs here in the Seattle area. Attracting and encouraging young women in the science and engineering fields has been hugely successful, with about 50% of the bachelor's degrees and 42% of the graduate degrees in these fields awarded to women (NSF statistics from 1998 and 2001).

Mentoring women in transitional career stages

Although women comprise a significant proportion of SEM graduate students and receive many of the advanced degrees awarded, women continue to be significantly underrepresented in most science and engineering fields at the researcher and faculty level, as noted in a recent article in the Chronicle of Higher Education, "Where are all the Women?" (Wilson 2004). At the top 50 SEM departments, as determined by research dollars, only 8.4% of the faculty in 2002 were women (Nelson and Rogers 2005). Therefore, it is important to provide mentoring and support for women with SEM backgrounds through the graduate and post-graduate career stages. Small group or peer mentoring, in which small groups of mentees and a mentor meet to discuss and strategize career decisions, is one approach to mentoring women in these transitional stages. The advantages of such a mentoring arrangement are numerous.

The traditional benefits of mentoring—connecting with a person who has been where you are and has succeeded, drawing from a professional's more extensive experience, and receiving advice—are all present in the small group structure. Additionally, being involved with a group of mentees allows one to take advantage of the expertise, opinion, and experiences of the entire group. The small group structure can also provide a support network for each mentee and allow the mentees to tap into one another's professional networks. Most importantly, it offers the mentees a chance to see other women who are at the same career stage and who are often dealing with similar issues. Being able to see that you are not alone in dealing with a difficult situation is a tremendous help and often helps to put your issues into perspective.

The success of group mentoring helps to dispel two myths about mentoring: 1) it can only be done effectively in a traditional one-to-one format and 2) you only need one mentor. Good small group programs at several institutions like UCSF are the best argument that the format is effective. It is not often that one can find a single mentor that is an expert on every career issue that may arise. Different mentors will have different areas of expertise; being able to draw from the diverse experiences of a group exposes one to several mentors in a single group.

Mentoring opportunities with AWIS This year our chapter is providing two avenues for improving the number of female scientists in mentoring relationships. First, we plan to continue our one-on-one mentor-mentee program by working with WISE at the University of Washington, Seattle. Our hope is to recruit enough mentors that we can expand the program to include students at other universities in the Seattle area as well. We are always in need of more mentors from all fields of sub disciplines and career paths in science, math, and engineering. Please e-mail Claire Horner-Devine (mcdevine@alumni.princeton.edu) if you are interested in participating as a mentor or mentee in this program.

Second, we are initiating a small-group-mentoring program for our members who are at the early stages of their careers in science. We're aiming to recruit lots of mentors, both in and out of AWIS, from all different types of science career paths. If you are interested in participating in this program, either as a mentor or mentee, please e-mail Becky Klein, rebklein23@gmail.com. We're looking forward to creating a successful program that will help our AWIS members.

References

- Gardiner, M. L. (1999). Making a difference: Flinders University Mentoring Scheme for Early Career Women Researchers. Adelaide, Flinders University of South Australia.
- Jackson, V. A., A. Palepu, et al. (2003). "Having the right Chemistry": A Qualitative Study of Mentoring in Academic Medicine." *Academic Medicine* **78**(3): 328-334.
- Nelson, D. J. and D. Rogers (2005). A national analysis of diversity in science and engineering faculties at research universities. Norman, OK <http://cheminfo.chem.ou.edu/~djn/diversity/briefings/Diversity%20Report%20Final.pdf>.
- Wilson, R. (2004). "Where the Elite Teach, It's Still a Man's World." *The Chronicle of Higher Education* **51**(15): A.8.

Share Your Love of Science—Be a Mentor for the Student Biotech Expo

Submitted by Reitha Weeks

Preparations are underway for the 2006 Student Biotech Expo that will be held March 6th at Meydenbauer Center in Bellevue. It is not your usual science fair! More than 300 students from 12 public high schools are expected to participate and you are needed as a mentor! The mentors serve as references to the students for their projects and become career role models. Many mentors assist

students in areas different from those they specialize in as scientists. There are several forms of mentoring so your time commitment can vary from 2-20 hours - you may read a student paper, have email contacts, individual or group meetings or set up an internship. The mentorship commitment extends from September - March (although many projects are completed by January). Mentors are invited to attend the Expo in March. If you cannot mentor, please consider becoming a judge.

The Expo promotes science literacy and allows students to showcase their work in many different forms - art, music, web page design, molecular modeling, and more. It facilitates connections between the scientific and education communities. Mentors have proven to be a very valuable part of the program. General information regarding the Student Biotech Expo can be found at: <http://www.nwabr.org/studentbiotech>. You can sign up to be a mentor at: http://www.nwabr.org/studentbiotech/mentor_info.html. If you have any questions, please contact Evelyn Laminack, mentoring coordinator, at elaminack@nwabr.org or 206-956-3640.

Poster Judges Needed at Ballard High School

Submitted by Reitha Weeks

Remember when you had to prepare and present your first scientific poster? Students in the Ballard HS Biotech Academy are going through that experience and you are needed to be a judge of those posters. The poster session will be Thursday, Nov. 17, at Ballard HS, from approx. 10 am to 1 pm. You will have the opportunity to talk with the students and evaluate their posters for scientific content and analytical presentation. If you are interested in being a judge, please contact Dr. Dewey Moody, chemistry teacher at Ballard HS, at demoody@seattleschools.org.

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