



A Publication for  
Seattle AWIS  
Summer 2013

# Women in Science



this issue:

My Inspiration P. 2

Joint Event with Women in Bio P.3

Shelia Lukehart Scientific Advancement Award P. 4

HIVEBIO: Universal access to Biotechnology P. 5

Biotechnology and Pharmaceutical news P. 6

Summer marks the end of the AWIS year and my first year as President. I am proud to have accomplished so much this year. We initiated a new award for our chapter and celebrated at an inspirational banquet. This summer newsletter highlights our year and presents some stories to inspire you in your work.

June marked the 50<sup>th</sup> anniversary of the Equal Pay Act, the first law that required men and women be paid the same for their work. Those of you who are national members may have seen that although this important law is 50 years old now, women continue to be compensated less than men for their work. Even in STEM fields, women make 86% of men's salaries. To help level the playing field, AWIS is supporting the Paycheck Fairness Act, a law that makes it legal for men and women to talk about their pay at work, so that discrepancies in pay can be identified. We would encourage you to contact your federal representatives and encourage them to support the Paycheck Fairness Act.

We regularly host events on the third Wednesday of the month at the Fred Hutchinson Cancer Research Center. In case you missed any of our events, in this newsletter, you can read about: the joint event we hosted with Women in Bio (WIB) where Stewart Parker of IDRI talked about her career as a biotech leader; the career panel we hosted on careers in academia; a networking happy hour at Paddy Coyne's and a tour of the local diagnostic group IND; and finally our Awards Banquet. We will resume Programs starting in September. We hope that you will join us at one of these events.

In June, we were excited to host our first Awards Banquet. This event served to celebrate our seven scholarship winners, and the winner of the Seattle AWIS Award for Scientific achievement, which was awarded to Dr. Sheila Lukehart, a professor of medicine and global health at the University of Washington. You can read about the event, the scholarship winners, and the work that Dr. Lukehart was lauded for in this newsletter. The sold-out event was an exciting celebration of our local members and scientists.

An AWIS membership was part of the Award for Scientific Advancement, but Sheila Lukehart is a founding member of Seattle AWIS and opted to gift her membership to new members. Katriona Guthrie-Honea is one of the recipients of the gift. Katriona is a remarkable young woman that wants to open access scientific resources to the public. She is launching a DIY Bio lab with Bergen McMurray called HiveBio. This community lab space is due to open its doors soon. It is exciting to see this new venue open to biologists and people who want to learn about biology in Seattle. Our very own board member, Dr. Sandlin Seguin will be the Executive Director of Education to ensure that those pursuing their DIY science have the resources and community that they need.

Continued on Page 2.

## Letter from the AWIS president- continued from page 1.

We also are celebrating 10 years of our Girls in Engineering, Math, and Science (GEMS) science enrichment program for middle school girls. The GEMS program is supported by our chapter and provides hands on experience and field trips for girls to explore and encourage their interests in science careers. The GEMS program works to inspire girls' interest in science. In this issue, high school science student Christina Huang shares what inspires her interest in science. The GEMS Program has been so successful in the last decade that we are hoping to expand to an additional south Seattle location. If you know of a location that might work for our girls, please let us know.

As you may be aware, National AWIS has restructured their dues. The good news is that students can now join just the chapter without paying national dues (but will not have access to national benefits). All other fees have drastically increased. We strive to provide access to all women, our chapter dues will not increase and our monthly meetings will remain free and open to the public. Our board is exploring alternate fee structures for our popular mentoring program to ensure continued access to everyone- especially young professionals and those that are unemployed. If you are affected by these changes, please contact our Board to further discuss these changes.

Looking forward to seeing you at our next event!

-Melissa Seattle AWIS President

## My Inspiration

By Christina Huang

We live in a world that heavily depends on energy for almost everything. Unfortunately, the sources of energy upon which we are most reliant are rapidly disappearing and leaving damage in their wakes. Consumption of fossil fuels destroys the ecosystems from which they are extracted, pollutes the air we breathe, and creates an unstable global climate. In addition, not only does dependence cause environmental damage, but it also creates political instability as countries struggle to secure foreign oil markets. Thus, I am inspired by the goal of making clean, renewable energy both accessible and reliable.

Various alternative energy sources already exist, including wind, solar, nuclear, hydro, and geothermal, but they are currently neither widespread nor economical enough. Throughout my life, I have heard talks about global warming and reducing one's carbon footprint. I have been a part of "going-green" movements and seen countless recycling advertisements to address this pressing issue. However, as population and technology usage increase, more drastic measures will be needed than merely consuming in moderation. What the world requires is an energy revolution, and my hope is that I can help make that revolution a reality. STEM will guide our generation to find a solution to the energy problem, so that we may permanently replace fossil fuels with a safe, renewable alternative.

--

*Christina Huang is a rising senior at Lakeside School and loves math and science. She is particularly interested in the applications of textbook concepts to the real world, and thus enjoys learning about the many ongoing developments in research and technology. Outside of the classroom, Christina enjoys rowing, playing the violin, and volunteering at local organizations. In her spare time, she also loves to bake for her friends and family.*

# Women in Biotech/AWIS Joint February Event

By: Mai Bailey

In an exciting joint event between AWIS and Women in Bio, Stewart Parker was invited to tell her own entrepreneurial journey from “a High School Chief Majorette from a rural Eastern North Carolina county” to a compelling CEO in Biotech. In short, she summarized her experience as a “wild ride,” full of ups and downs and unexpected turns.

After graduating from college and receiving her Master’s degree in Business Administration from the University of Washington, Stewart was hired at Immunex Corporation (now part of Amgen) to provide general support through a little accounting, a little business management, and even a little equipment maintenance. Stewart touched upon the fact that at no time did she ever envision herself as a biotech CEO, but that she knew she wanted to make an impact. Through her own drive and initiative she, in the 17 years of leading Targeted Genetics, was the CEO of a \$25 million market cap company to even \$1 billion. In her own words—“I wish I could tell you that this all occurred chronologically as I’ve just laid it out, but no.”

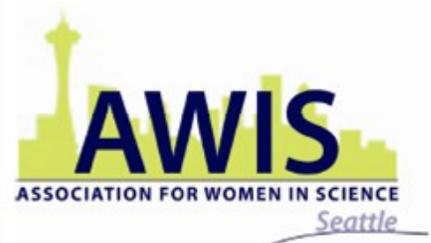
One major unexpected turn in her career was in 2007 when a patient in a clinical trial suffered a serious adverse reaction to medication and ultimately died. While it was proved that there was no connection between the product and the patient’s illness, the impact of this was a major hit to the company. Stewart reflected on the incident and looked upon the incident: “I often think the theme of Targeted Genetics should be ‘when bad things happen to good people’”. She stressed to the audience that with any new science or technology, there are bound to be waves of despair and exuberance. She also spoke of her growing concern for new cutting-edge therapies in the current economy, feeling that it is becoming more and more difficult for early stage research to find funding. She said “Yes, it is good discipline to have to conserve resources, but it’s awfully hard to fund Phase II clinical trials...Selfishly speaking, I’m afraid that when I hit 70 and start needing new therapies, they aren’t going to be there. The pendulum has got to swing back the other way, or we’ll all suffer.”

In 2008, Stewart retired from Targeted Genetics but in only one year, she found herself itching once more for the biotech scene. She became a WBBA Commercialization Consultant and through working with individuals searching for better healthcare information she became somewhat “infected,” She met Dr. Steve Reed, founder of IDRI, a not for profit global health institute and found herself joining the IDRI team. She connected with their goals and she commented: “...I felt that at this stage in my life, transferring my focus and skills to the global health arena was going to be extremely exciting and fulfilling.”

In closing, she reflected upon her journey by saying: “Anything can happen...and often bad things do happen. If you are to succeed in these difficult times, you will need to reach beyond yourself. And as a take-away for the audience she told them that she left them with a final thought to “take advantage of serendipity. And of course, prepare for the marathon ahead!”

---

*Mai Bailey is a Research Associate at IDRI in the TB Drug Discovery Research Group which focuses on discovering and developing novel drugs to cure both drug sensitive and drug resistant TB. She is also Seattle AWIS board member as a Co-chair for the Events/Program Committee.*



# Sheila Lukehart to be Honored with the 2012 Seattle AWIS Award for Scientific Advancement

By: Sandlin Seguin

AWIS National recently performed a study on gender bias in scientific awards, by assessing the proportion of women in a variety of scientific fields, relative to the number of female awardees of top ranking prizes for scientific achievement and teaching. What they found was that women are underrepresented in scientific achievement awards. Since the Seattle Chapter of AWIS believes that there are equal numbers of highly performing men and women in science, and in fact that some of these outstanding scientists live and work in the Puget Sound Area.

The Seattle Chapter of AWIS sought to identify a woman whose work is cutting edge and inspiring, a woman who is a leader in her field. The nomination was sought for *“a woman with innovative contributions to a field of science, technology, engineering, or math (STEM) including but not limited to significant scientific advances that have opened new avenues in a research field, establishment of programs or groups that encourage women in science, or scientific work that leads to the establishment of new policy.”* This brought in dozen of nominations for women whose work both inspires and impresses, across a variety of STEM disciplines. The award committee would like to thank all those who took the time to offer nominations for our inaugural award.

Dr. Sheila Lukehart, Ph.D. is a Professor of Medicine and Global Health, Adjunct Professor of Microbiology, the Director of the University of Washington STD & HIV Research Training Program, and Assistant Dean for Research & Graduate Education at the University of Washington. As a scientist, she leads a lab that studies the pathogenicity of *Treponema pallidum*, the pathogen that causes syphilis. Her work has uncovered gene families that play essential roles in the pathogenicity of syphilis, including antigens which may make vaccine targets for syphilis. Her lab's clinical work on syphilis ranges from the epidemiology of syphilis to understanding the basis of neuroinvasion. Her research is both exciting and important, and we are pleased to honor Dr. Lukehart with the 2012 Seattle AWIS Award for Scientific Advancement.



# HiveBio: Universal Access to Biotechnology - Step 1

By Katriona Guthrie-Honea

*HiveBio is a community biology opening late July. Co-founded by Bergen McMurray and Katriona Guthrie-Honea, it focuses on making technology accessible regardless of background, age, or financial standings.*

As a high school student looking to test an award winning project idea, I spent months looking for a lab to test my idea. After more than 100 emails and 20 meetings, I found an internship, but I still couldn't test my idea. What about all the other people that have biology ideas? I got inspired to open a Seattle Bio-Hackerspace, Hivebio, with co-director and founder, Bergen McMurray. Bergen experienced some of the same access problems, but with financial rather than antiquity roots.

Bergen, as a single mother, learned that currently, it is nearly impossible for a bio-science enthusiast to gain hands-on experience in a lab without a formal science degree. This requires a level of income that creates an inappropriate gap between means and access to education. In addition, science education in US schools is often ineffective. The existence of a DIYbio lab opens opportunities to both adults and children. DIYbio spaces are present in almost every major city in the US, like Gen-space in New York, and Biocurious in San Francisco. Seattle is one of the few cities with a big biotech industry lacking a community lab space.

We have reached a critical point for innovation. A few hot spots bloom with creation, but for the most part, our youth sits at home with Mario Kart and first person shooter games. Science education consists of baking soda and vinegar volcanoes, and

kids lose interest in science before they even realize what it is. By opening Hivebio, we are trying to seize the moment to increase access to science. Hivebio provides a community space for people in interested biology to congregate and share ideas and experiment. We believe that spaces like Hivebio will promote new ideas, and a better society informed about the science around them.

We should be enticing kids to play with science, to foster innovation from an early age. The US falls behind other countries in science education, but we can change that. A 6-year old can extract DNA from a strawberry; a 10-year-old can try their first experiment with algae. High school and college students should be encouraged and able to test their ideas, but they can't even order a plasmid online. We need to make simple, safe biology tools more available.

Continue on page 6.

## HiveBio: Universal Access to Biotechnology –continued

We have a safety ranking system for biology, so why is Bio Safety Level 1, “suitable for work involving well-characterized agents not known to consistently cause disease in healthy adult humans, and of minimal potential hazard to laboratory personnel and the environment”, so restricted? Biotech companies don’t even want to deliver simple things like buffers to DIYBio labs. They’re too worried about getting sued. We can access most reagents, but the process can be harrowing at times. Some companies like Fisher Scientific have been amazing and supportive, while others never even replied to our emails.

Basic biomaterials need to be widely available! Biotech stands poised in the

same boom potential as computers 20 years ago, but the difference lies in access to computers compared to the biological tools. We are going to lose the potential for innovation if people cannot interact with Biotech. I envision a world where I can go to Amazon, go to the Bio category, and order some plasmids to run my experiment.

We want to help make biology more accessible to the entire community. Embracing the principals of open access to information, DIYbio seeks to demystify science through education. Education is a major focus of HiveBio. We are already planning for a microbiology class, and a sheet brain dissection class. We are plan-

ning to open mid-July, and are looking for volunteers to teach classes, be lab monitors, and help the organization. We’re also looking for reagent and chemical donations to keep membership costs down.

We believe that putting the tools of science in the hands of citizen scientists supports true innovation, because *E. coli* is fun! In the 30s, kids built crystal radios, in the 50s they built model airplanes, my parents played with Erector sets. DIYBiology can be the Erector set of today, but we have to provide spaces to build plasmids. That’s why we are opening HiveBio Community Biolab in Seattle, Washington.

## Biotechnology and Pharmaceutical Industry News

By Cathy Manner

The US Food and Drug Administration (FDA) has approved **Theravance, Inc.**, and **GlaxoSmithKline (GSK)**'s Breo™ Ellipta™ (fluticasone furoate and vilanterol inhalation powder), a once-daily treatment for chronic obstructive pulmonary disease (COPD). This potential blockbuster drug is expected to replace GSK's Advair as a leading treatment for COPD, a family of lung diseases, including emphysema and chronic bronchitis, that is diagnosed in approximately 12 million people in the US annually. (*San Francisco Business Times*, May 10, 2013)

The FDA has accepted **Merck's** Biologics License Applications (BLAs) for two sublingual allergy immunotherapy tablets - one for ragweed pollen and the other for Timothy grass pollen. Merck developed the tablets in partnership with **ALK-Abello**. The company expects the FDA's review for both therapies to be completed in the first half of 2014. (Pharmabiz.com, May 10, 2013)

Continued on page 7.

# Biotechnology and Pharmaceutical Industry News

- Continued

**Amgen** has announced that a Phase 3 clinical trial of its colorectal cancer drug Vectibix® (panitumumab) met its goal of non-inferiority for overall survival when compared with rival drug Erbitux® (cetuximab). Vectibix, the first FDA-approved fully human anti-epidermal growth factor receptor antibody, was previously shown to improve progression-free survival in colorectal cancer, which is the third most common cancer in the US. (ClinicaSpace.com, May 8, 2013, and *Wall Street Journal*, May 7, 2013)

**Nimbus Discovery** and **Shire** have announced a partnership to co-develop oral drugs for a family of rare genetic conditions known as lysosomal storage disorders. The first disease target has been selected but not disclosed. Nimbus will use its unique computer-based approaches to identify a lead candidate, which Shire will then take through clinical trials, regulatory approval, and commercialization. Companies such as **Genzyme** and **BioMarin** have developed enzyme replacement therapies for lysosomal storage disorders, but an oral drug would potentially give Nimbus and Shire an edge in the market. (Xconomy, May 8, 2013)

## AWIS visits Integrated Diagnostics

By Jessica White

AWIS held a member only open house at Integrated Diagnostics (Indi) in May. This sold out event featured an introduction to integrated Diagnostics, a panel of women working at different levels in the company giving insight into working at indi, career paths to working at a small start-up, likes and dislikes of job activities, and the culture at Indi. After the panel discussion a tour of the Indi facility was given.

Indi was co-founded by Dr. Lee Hood and Dr. David Galas in 2009. Indi works in large-scale blood-based molecular diagnostics to detect disease at the earliest stage. Indi's technology is based on Dr. Hood's research at The Institute for Systems Biology which investigates protein blood biomarkers that can report the physiological state of the body's 50 major organs. By selecting biologically relevant biomarkers for monitoring in blood Indi is able to identify the presence of disease at the earliest stage. Currently the main disease focus of the Indi technology is lung cancer and Alzheimer's disease. Indi technology uses MRM mass spec technology to identify biomarkers in blood.



## SEATTLE AWIS SCHOLARSHIP RECIPIENTS (2013-2014)

The Seattle chapter of the Association for Women in Science (AWIS) started a scholarship program in 1990 for upper division undergraduate women who are majoring in science, math, and engineering fields at four-year colleges and universities in Washington State. Every year, we award four to eight scholarships ranging from \$1000 to \$1500 apiece. Scholarship recipients are selected based on academic achievement, financial need, motivation to pursue a science career, and community service.

This year, Seattle AWIS is pleased to award scholarships to seven outstanding future scientists. Special thanks go to our scholarship fund donors: Bristol-Myers Squibb, Intellectual Ventures, Amgen, the Seattle AWIS SMARTGirls (Science and Math at the Right Time for Girls) Program, and individual AWIS members and supporters. Following are biographical sketches of the 2013-2014 scholarship recipients.

**Aleena Arakaki** is entering her senior year at Seattle University (SU), where she is majoring in cell and molecular biology. She is receiving a scholarship funded by Bristol-Myers Squibb. Her childhood love of science was augmented by research experience at a Summer Science Institute after her freshman year of high school. The deaths of her mother and grandmother from cancer ignited a fire in Aleena to become a biomedical cancer researcher. Working at research institutes (the University of Hawaii Cancer Center, the Jackson Laboratory, and the Fred Hutchinson Cancer Research Center) has shown her that she can contribute to the fight against cancer. She joined the Colleges Against Cancer Club at SU and is now the President. The club runs events to raise cancer awareness, promote advocacy, and fundraise for cancer research and patient programs. Aleena has also volunteered with Expanding Your Horizons (EYH), a daylong conference at SU to encourage middle school girls to learn about science and pursue science careers. After graduating from SU, Aleena will continue to prepare for her career by earning a Ph.D. in either cancer biology or cell and molecular biology.

**Jennifer Arthur** is entering her senior year at University of Washington (UW), where she is majoring in biology and global health. She is receiving the Angela Paez Memorial Scholarship. Jen has been totally self-supporting since age 16. Her interest in biology was reinforced by classes at Seattle Central Community College, serving as Vice-President of the Premedical Society, and working at the Seattle Biomedical Research Institute. She has volunteered for global health projects in Tanzania, India, and Vietnam. Currently, she gives back by volunteering for the King County Public Health Reserve Corps, mentoring foster care alumni through the UW Champions Program, and teaching biology classes at the King County Jail and the Monroe Prison. Jen's passion is to work with low-income and under-served individuals to improve their health in the US and abroad. After graduating from UW, she will attend medical school and pursue a career as a physician. Additionally, she plans to earn a Master of Public Health degree and a diploma in Tropical Medicine and Hygiene.

**Rebecca Campbell** is entering her final year at SU, where she is majoring in diagnostic ultrasound and minoring in biology. She is receiving the Leon and Emma Solomon Memorial Scholarship, which is her third Seattle AWIS scholarship. Rebecca's interest in science, and specifically diagnostic ultrasound, began when she was in sixth grade and attended the EYH conference at SU. She has loved her summer research experiences at the Fred Hutchinson Cancer Research Center and Amgen labs, as well as a premedical/surgical internship program at University of California Davis.

*Continued on page 9*

## SEATTLE AWIS SCHOLARSHIP RECIPIENTS-*continued*

She gives back/pays it forward by volunteering for several programs that encourage girls' interests in science, e.g., leading a diagnostic ultrasound workshop at EYH and implementing a science outreach program at a local elementary school. After completing a year-long internship in diagnostic ultrasound, Rebecca will graduate from SU and work in this profession. She plans to begin medical school in fall 2015 and pursue a career as a physician in which she will use her diagnostic ultrasound experience.

**Samantha Kennefick** is entering her junior year at Gonzaga University (GU), where she is majoring in biology and minoring in women's studies. She is receiving a scholarship in honor of Malala Yousafzai, a 15-year old Pakistani activist for girls' education. Samantha is passionate about ecology, environmental biology, international travel, and women's rights. She gives back as a Teaching Assistant at GU and as a volunteer in a science outreach program in Spokane high schools. She especially enjoys encouraging women and girls to study science and math and aspire to careers in these fields. As a global citizen, Samantha took the initiative to plan a field research project in East Africa for this fall; she will study wildlife management and conservation and do volunteer work with the local women. After graduating from GU, Samantha looks forward to serving in the Peace Corps for two years and then earning a Ph.D. and pursuing an ecology career that combines field research and teaching.

**Erin Lapsansky** is entering her senior year at GU, where she is majoring in biology. She is receiving a scholarship funded by Bristol-Myers Squibb. Erin's interest in biology was inspired and encouraged by her mother, who is a biologist, and by her professors and undergraduate research mentors at GU. By the end of her sophomore year, Erin had isolated and characterized a completely unique bacteriophage. Her current research focuses on amplifying a gene in roses that produces an olfactory signaling molecule in order to deter aphids from attacking roses and to attract aphid predators. She presented her research findings at a recent conference. She is now conducting independent field research in Zambia, focusing on plant-insect interactions. After she graduates from GU, Erin plans to earn a Ph.D. in a botany field and pursue a research career that focuses on reducing the use of pesticides and fertilizers in agriculture. She is also interested in studying the ways in which plants adapt to harsh environments, and in amplifying these characteristics in agricultural plant species in order to promote sustainable food supplies in poor countries.

**Casey Pinckney** received her Associate in Science degree from Bellevue College (BC) in 2012 as part of the Running Start program and is now entering her senior year at SU, where she is majoring in math. This is her second Seattle AWIS scholarship and is funded by the SMARTGirls Program. Casey is passionate about both research and teaching. She participated in the BC Community College Genomics Research Project, conducted independent math research at BC, and is now part of a student research team at SU. In April, she presented her current research at a professional mathematics conference. Casey is a true Renaissance woman; she tutors SU students in math, volunteers for a science and math after-school program for under-served elementary school students, plays the harp, and teaches harp at the Magical Strings Harp Camp each summer. This summer, Casey was invited to join a research team at the University of Portland for a Research Experience for Undergraduates (REU) project in *Groups and Geometry*. After graduation from SU, Casey aspires to earn a Ph.D. in math and become a math professor and role model for other women.

## SEATTLE AWIS SCHOLARSHIP RECIPIENTS-*continued*

**Ngoc-Khuyen (Quinn) Tran** is entering her senior year at UW, where she is majoring in electrical engineering. She is receiving a scholarship funded by Intellectual Ventures. An immigrant from Vietnam, Quinn is the first person in her family to attend college. She works very hard to support herself through college and contribute financially to her family. Quinn's participation in the Redmond High School Robotics Club and in undergraduate research projects at UW have stimulated and reinforced her passion for electrical engineering. In gratitude for the opportunities that she has had in the U.S., she believes strongly in giving back. She teaches Vietnamese to Vietnamese-American children and helps immigrants prepare for citizenship interviews. After graduating from UW, Quinn aspires to attend graduate school – immediately if it is possible financially or after working for a few years. Her career will focus on combining neuroscience and robotics research to develop machines to assist disabled people.

## GEMS Celebrates 10 Years of Girls in Science

By Michelle Wahlin

Draw a scientist. It's the first day of GEMS, and this is the first task the 7<sup>th</sup> and 8<sup>th</sup> grade girls are given. Is it a boy? A girl? What are they wearing? Do they have any tools? We all have a perception of what a scientist is. An astronaut. A chemist. Our dad. Crazy hair and a lab coat. It is our hope that when the girls finish their time in GEMS in May, their perception has broadened to include so many different types of scientists, male and female. Most importantly, we hope it includes themselves.

As we approach our 10<sup>th</sup> year as an AWIS program, we can reflect on the influence we have had, the girls we have inspired, and the challenges and successes of preparing nearly 100 activities for 30+ girls. Mostly, though, we just look forward. We look forward to October when we get to meet again and see the drawings of scientists from a new group of students. We look forward to each monthly activity, with KoolAid and toothpick bridges and floating plankton. We look forward to our field trips and even to the end of the year when the girls thank us with tears in their eyes and reluctantly leave their last GEMS meeting. We look forward to the girls' future, as scientists and policy makers and teachers and writers. And we look forward to doing it all over again the next year!

Michelle Wahlin is the co-chair of the AWIS GEMS program, as well as a UW PhD candidate who teaches science at Lakeside Upper School.

# AWIS April Event

By Frances Chu

In April, AWIS held a panel discussion on academic careers, featuring women academicians from diverse institutions. Panelists included Nina Salama, Ph.D., Member of the Human Biology Division at the Fred Hutchinson Cancer Research Center, Bonnie Becker, Ph.D., Assistant Professor of Marine Ecology at UW Tacoma, Maitreya Dunham, Ph.D., Assistant Professor of Genome Sciences at UW Seattle, Janet Bester-Meredith, Ph.D., Associate Professor in the Department of Biology at Seattle Pacific University, and Fran Solomon, Ph.D., Owner & Instructor of Environmental Teaching International and part-time faculty at Evergreen State College in Tacoma. These women hailed from institutions that differed in size, as well as the focus on research vs. teaching

UW Tacoma is a rapidly expanding college that focuses on three things: teaching, research, and service. Peer-reviewed publications and bringing in outside funding are required for tenure. The teaching load is grueling and there are no teaching assistants, but Dr. Becker emphasized that UW Tacoma only pays her 9 months of her salary, so she has the freedom to bring in outside grants or take it easier during the off months.

Before coming to UW Seattle, Dr. Dunham completed a fellow position rather than doing a classic postdoctoral fellowship. Dr. Dunham is now one-month away from handing in her tenure packet. As the focus at UW Seattle is both research and teaching, Dr. Dunham stressed that the work is infinite and finding a work/life balance is important.

Dr. Bester-Meredith attended a small liberal arts college as an undergrad and always wanted to return to teach at one. She began at SPU as adjunct faculty and stayed on to obtain a tenure-track position. Because of her time as adjunct faculty, Dr. Bester-Meredith was placed onto an accelerated

tenure track. A benefit of teaching at a small liberal arts college is getting to know the students well, but the faculty also carry a large teaching load and complete the majority of their research during the summer.

At FHCRC, the only mission is research and therefore there's a lot of support structure in place to facilitate research goals. Along with this, more of the faculty's salary comes from grants compared to the case at teaching institutions. However, the members of FHCRC can teach and Dr. Salama has affiliate faculty appointments at UW where she can teach on her own terms. FHCRC doesn't really have a tenure system in the classic sense. After they begin, faculty are up for review every 5 years. A promotion to a full member can occur after 10 years, but full members are still reviewed.

Dr. Solomon worked for state and local environmental agencies after graduate school, but took an opportunity to teach in China and found it immensely rewarding. Dr. Solomon used her network and guest teaching experiences to find more permanent teaching jobs. Evergreen State College in Tacoma is composed mainly of adult learners as students only attend for their junior and senior years. The students are motivated to learn, but grading comes in the form of a one page evaluation rather than letter or number grades. Dr. Solomon stressed that career options are not set in stone and encouraged people to take unexpected opportunities and calculated risks that may lead to a more rewarding career.

Despite the diversity of institutions represented by the panel, several themes emerged regarding success in an academic career. These included effective communication (both speaking and writing), the ability to juggle many responsibilities, and the ability to effectively run a "small business," which was compared with running a lab. All panelists enjoyed the freedom and autonomy that academic careers afforded them, as well as the opportunity to teach and mentor students.

--

*Frances Chu, Ph.D. is completing her postdoctoral studies at the University of Washington where she is studying how mycobacteria manipulate host-signaling pathways to promote mycobacterial pathogenesis*

# Seattle AWIS Awards Banquet

On June 19, Seattle AWIS hosted its first annual Award Banquet. This was a wonderful opportunity for members and supporters to gather and celebrate the great work of the chapter, our scholarship winners and the first Awardee for Scientific Advancement, Dr. Sheila Lukehart.

The banquet was hosted aboard the MV Skansonia on Lake Union. Guests enjoyed a cocktail hour and networking before dinner. During dinner, the seven Seattle AWIS scholarship awardees were announced and honored for their achievement: Aleena Arakaki, Jennifer Arthur Rebecca Campbell, Samantha Kennefick, Erin Lapsansky, Casey Pinckney, and Quinn Tran. You can read more about these accomplished students in their bios in the newsletter.

The board also acknowledged those who have been members of the chapter for 10 or more years. These women include Barbara Mandula, Valerie Lewis, Ann Wilson, Lee Magid, Alyce DeMarais, Nicole Provost, Erica Jonlin, Shelli Dennis, Reitha Weeks, M. Patricia Morse, Stephanie Tatem Murphy, Loveday Conquest, Frances Solomon, Lisa Iype, Cathyrne Manner, Merrill Hille, Julie Lutz, Gretchen Meller, Cheryl Greengrove, Linda Park, Virginia Stout, Katie Sprugel, R. Smith, Jean Feagin, Frieda Taub, Martha Koester, Nancy Friday, Jill Whitman, Sheila Lukehart, and Melissa Woodrow. We would like to thank all these women again for their participation and involvement in our organization.

Two of these members were specifically honored for their service on the board. Board members Dr. Fran Solomon and Dr. Reitha Weeks were active members when the Seattle Chapter of AWIS was founded in 1984, and have remained in various positions on the board ever since. Dr. Solomon established the undergraduate scholarship fund, which she has administered for the last 23 years. Dr. Weeks is currently our treasurer, although she has held other board positions in her years of involvement. The Board is grateful for their commitment to the organization and the advice, encouragement and support they have both provided over the years.

The highlight of the evening was a talk by Dr. Lukehart, who shared what brought her to science and her passion for *Treponema pallidum*. She was quick to acknowledge her mentors, collaborators and trainees who have supported her career success. She reflected on the changes that have made careers for women in science more common. Her talk was inspiring for all the men and women who attended.

The Awards Committee would like to acknowledge the sponsors who helped make this evening possible, including our Platinum Sponsor Intellectual Ventures, our Gold Sponsor Dendreon, our Silver sponsor Integrated DNA Technology (IDT), and our table sponsors K & L Gates, Fred Hutchinson Cancer Research Center, UW Department Of Global Health, Seattle BioMed, and PATH.

Finally, the Board would like to acknowledge the hard work of the Award Event committee: Melissa Lerch, Jane Dickerson, Prerana Ranjitkar, Mariola Kulawiec, Linda Burke, Victoria Lofdahl, Hannah Chapin, Nathalie Acestor, and Cathy Manner. Without these volunteers, this event would not have been possible.

