Historical Profile
Florence Bascom, PhD
By Cathy Manner

“The fascination of any search after the truth lies not in the attainment…but in the pursuit…One feels oneself in contact with something that is infinite and one finds joy that is beyond expression in sounding the abyss of science and the secrets of the infinite mind.” – Florence Bascom

Heeding her father’s advice to “make work an immediate joy,” Dr. Florence Bascom, the “first woman geologist in America,” built a satisfying and successful career in the early part of the 20th century. Dr. Bascom made substantial contributions to her field, both as a scientist and as a teacher who trained many other distinguished female geologists. Her extraordinary accomplishments are a natural result of the unconditional support of her family, her own drive and determination, and her unwavering commitment to science education for women.

Bascom was born in Massachusetts in 1862, the youngest of six children. Though encouraged by her parents from an early age to pursue an education, she encountered many obstacles throughout her career. While at the University of Wisconsin, where she earned her Bachelor’s and Master’s degrees, she and the other female students had limited access to the library and were barred from classrooms already filled with men. Bascom faced further inequity at Johns Hopkins University, where she enrolled in graduate school in 1889. Not deterred by this poor treatment, she continued to work diligently on her thesis and became an expert in the areas of crystallography, mineralogy, and petrography. She earned her PhD in 1893, the first doctoral degree granted to a woman in geology at Johns Hopkins.

Impressed by her credentials, Bryn Mawr College recruited Bascom for a faculty position in 1895. She founded the school’s geology department and spent her 33 years at Bryn Mawr engaged in research on the Appalachian Piedmont. This work, which resulted in over 40 published papers, formed the foundation of the current understanding of Piedmont geology. In addition, Bascom, who was as devoted to teaching as she was to research, trained many women who also became accomplished geologists.

Bascom received many honors for her outstanding work. In 1896, she was the first woman hired by the U.S. Geological Survey, where she pioneered the use of microscopes in the study of rocks and minerals. In 1901 she was also the first woman to present a paper before the Geological Society of Washington. Five years later, she was listed as one of the country’s 100 leading geologists in the first edition of American Men and Women of Science. Then, in 1924, she became the first woman elected to the Council of the Geological Society of America.

(article continued on page 5.)
AWIS Members on the Move…..

Sharon Wampler, PhD has accepted a position as a Field Application Scientist at GeneFormatics, Inc., an early stage structural genomics company in San Diego. She is eager to return to the local biotech scene following her six-month sabbatical enjoying the life of leisure and unemployment.

Barbara Armstrong has joined Chromagen, Inc. as a Research Scientist. Chromagen is a biological assay partner that develops platform fluorescence technology and screening assay products for pharmaceutical drug discovery. The company’s focus is to develop advanced detection capabilities using proprietary fluorescence chemistries, detection instrumentation, and biological assays for drug discovery.

Tina Kuus-Reichel, PhD has been promoted to Director, Research for the Immunology Operations at Hybritech. Tina has been leading Immunology research for over 20 years and brings both technical and strong team skills to the group. Tina will lead in the development of a more forward-looking plan for technology portfolio expansion and research in the field of cellular immune response testing.

AWIS Outreach Committee
Anna-Maria Hays

At the last Outreach Committee meeting, we discussed on-going activities and proposed new activities for the committee in the next year. If you are interested in any of the following activities, or want to be involved with the committee, contact Anna-Maria Hays at haysam@scripps.edu.

The Speaker’s Bureau. This group sends scientists out into the community (mostly science classrooms) to speak on science as a career or on some science topic. The Speaker's Bureau needs additional speakers, and a group willing to coordinate activities.

AWIS Science Day. Scientists share their career with junior and senior high school students, their parents and teachers. Volunteers are needed to help start organizing this event for next May (last year there were about 20 booths with various science projects.)

Call for Judges for the Science Fair GSDSEF (Greater SD Science and Engineering Fair.) AWIS-San Diego honors four student projects.

A number of new activities were proposed:

‘Email-Mentoring’ program. Allow more interactions between scientist and science classes; also introduce more computer scientists to interact with schools (i.e. web page design etc.)

Combine the efforts of the Outreach and Events Committee to provide a network between scientists and instructors (both schools and community colleges.)

-invite elementary, middle, high school and community college instructors to AWIS events to show the latest developments /interests in various science fields and also get input as to the level of science education/level of knowledge of students. This would promote more interactions between schools and AWIS and also provide a basis for the Speaker’s Bureau.

(continued in next column, see Outreach Committee)

---

Job Posting - TheScientificWorld

Methods and Protocols Editor

TheScientificWorld, a ground-breaking venture in on-line publishing and the dissemination of scientific information, is seeking an Editor to develop its Methods and Protocols database, to evaluate content, and work with other staff to ensure high-quality material is posted on TheScientificWorld. As the responsible Editor, you will be required to work with both external editors and authors to develop MaPEx into a first choice forum for depository and retrieval of current methods and protocols across all the life and biomedical sciences. In addition, you will be expected to review and assess solicited and submitted material and to ensure consistency of format and style. You will work with TheScientificWorld’s marketing staff to recruit content and develop MaPEx’s audience. Occasional travel to scientific conferences to follow developments in research and maintain close ties with the scientific community is anticipated.

The minimum qualification for this position is a PhD or equivalent in an area relevant to biomedical research. Additional experience at the postdoctoral level is desirable. Applicants should be currently engaged in active research or directly comparable editorial activities. This position requires a breadth of interest and a strong ability to think critically about a wide range of scientific issues. Successful candidates should also be highly motivated and creative, and able to work independently as well as in a team. No prior publishing experience is required. This position requires an in-depth knowledge of the research process and subject areas assigned as well as proven expertise in developing projects. Individuals must have excellent analytical, communication and interpersonal skills.

TheScientificWorld offers a competitive salary and excellent benefits to attract outstanding candidates who meet our high standards. This position can be based out of either our San Diego or south Florida office, although candidates from the Washington, DC or Oxford, England areas are also encouraged to apply. Interested candidates can submit either a resume or c.v. with a cover letter describing their backgrounds and experiences to:

Shari Edelstein, TheScientificWorld, Inc.,1903 S. Congress Avenue, Suite 200, Boynton Beach, FL 33426 jobs@thescientificworld.com fax: (561) 742-0069.

---

Outreach Committee (continued from previous column.)

Mentorship program

-mentorship at various levels: undergraduate/graduate students with Professors, scientists in industry with higher level scientists in industry (just as an example)

-match people with similar interests and possibly have small group meetings (potluck etc) to promote interaction and build friendships and networks.
Job Posting - Nanogen, Inc.

Nanogen is an entrepreneurial biotech company integrating microelectronics and biology to provide new products for medical diagnostics and drug discovery. We currently have openings for the following:

Applications Scientist – AWIS-00-70

Seeking an Applications Scientist to be responsible for customer sample acquisitions, optimization of customer assays and genotyping samples. Additional responsibilities will include occasional demos and support of in-house customer training courses. Individual will work with and provide technical support to Nanogen Field Application Specialists, Sales Representatives and customers.

Successful candidate must possess a PhD in Molecular Biology or related discipline and a minimum of 6 years of lab experience. Previous experience in industry is required; experience working with customers is strongly preferred. Candidate must have a high degree of creative thinking and problem solving skills as well as excellent communication and interpersonal skills.

Market Development & Analysis Manager – AWIS-00-88

Seeking a Market Development & Analysis Manager to collect market information in the form of Marketing Reports, focus groups, thought leader interviews, phone surveys, industry meetings, periodical review, customer visits, and so forth. Individual will also provide summarized analysis of market information such as competitive analysis and market development reports.

Successful candidate will possess a bachelor’s degree in science or manufacturing. MBA preferred. PhD a plus. 5 + years of marketing experience in molecular diagnostics, pharmaceuticals, or similar industry. Market development or market analysis skills a plus.

Must be a self-starter/self motivated, able to accomplish objectives set by supervisor. Must have excellent presentation/communication skills, excellent verbal and written skills, data analysis, competitive analysis and the ability to multitask and prioritize. Must be computer and phone literate. Must be able to travel occasionally.

Manager of Technical Education – AWIS-00-90

Seeking a Manager of Technical Education to be responsible for setting up a comprehensive in-house customer training program. Individual will be responsible for developing training materials and for conducting in-house training for customers and the Nanogen field force. Will also be responsible for some customer-site training and trade conference/road show workshops and seminars.

Successful candidate will possess a PhD in Molecular Biology or related discipline. Must have excellent communication and interpersonal skills, and excellent presentation skills. Experience in customer training is strongly preferred.

Quality Associate I –AWIS-00-95

Seeking a Quality Associate for in-process testing of cartridges & instruments, in-coming inspection of raw materials, performing stability studies, writing SOP’s, and following up on customer complaints. Successful candidate will possess a BA/BS in Chemistry or Biology and 1-5 years working experience in a medical device environment using reagents and analytical instrumentation.

Job Posting - Stratagene

Technical Writer/Editor

Responsibilities include editing, writing and updating product manuals. BS, MS or PhD in Molecular Biology or related with a min. of 3-4 years of lab experience. Previous experience writing and editing scientific literature with a strong command of the English language. Proficiency in desktop publishing and ability to edit/import graphics preferred.

Interested candidates send resume to Stratagene, 11011 N. Torrey Pines Road, La Jolla, CA 92037; ref. Req #22017-00R-N5, AA/EOE

Job Posting - Chromagen, Inc.

Research Assistants, Associates & Scientists

Chromagen is a rapidly growing San Diego based Biotechnology Company that develops and manufactures bioassays to facilitate drug discovery in the pharmaceutical industry. The R&D focus is to develop novel fluorophores and new technologies using DNA probes to maximize assay sensitivity.

We are looking for assay development candidates with BS, MS, or PhD degrees in Molecular Biology or Biochemistry with 0-5 years of related experience. Knowledge of Molecular Biology, Cell Biology, Biochemistry, or assay development is preferred. Assay development scientists will assist in development of platform assays for analysis of gene expression, enzyme activity, and receptor-ligand binding. We are also looking for candidates with B.S. degrees and experience in tissue culture. Our screening group is looking for candidates with experience in laboratory automation, screening, and fluorescence detection technologies.

We are also looking for creative Nucleic Acid, Organic and Bio-Organic Chemists/Biochemists. The nucleic acid chemist will synthesize modified DNA and RNA molecules. The Organic Chemists will help us design and synthesize highly sensitive fluorophores. The Bio-Organic Chemists/Biochemists will develop and evaluate DNA-protein conjugates. The chemists and biochemists should have BS, MS, or PhD degrees with a proven record of outstanding accomplishments in academic or industrial environments with 1-10 years of related experience. Experience in all modern spectroscopic techniques, HPLC, and protein chemistry (for biochemists) is desired.

In addition to offering competitive salaries and excellent benefits package, Chromagen offers the opportunity to work in a stimulating, multidisciplinary environment that encourages professional growth. Interested candidates should send their resumes to Chromagen, Inc., 10541 Roselle St., San Diego, CA 92121 or fax at (858) 558-7166. No telephone calls please. EOE
Job Posting - Yoh Scientific

Yoh Scientific is the premier scientific personnel firm in San Diego. We have partnered ourselves with the most successful Biotechnology, Pharmaceutical, and Medical Device companies in the area. We work with all levels of scientific personnel to enhance their personal career development as well as place scientific professionals into new permanent careers or into very rewarding contracts. We also offer the best compensation and benefits in the industry and are constantly looking for exceptional scientific talent. Please inquire about these specific opportunities and many other positions in both R&D and manufacturing at the best companies in San Diego. Also, please inquire about our ‘Online Career Services Center’.

Analytical Chemist – San Diego pharmaceutical company is seeking an analytical chemist with 3-7 years experience and a BS/MS degree. Duties include the design of experiments and analysis to characterize bio-material template products. Candidates need a thorough knowledge of HPLC analysis, protein characterization, SDS-PAGE, Western Blots, and 2-D electrophoresis. Any polymer experience is a plus but not required.

Research Associate I – Candidates must possess a BS degree in Chemistry or Biochemistry and have 0-2 years experience. Duties include organic synthesis and wet chemistry analysis in a GLP environment.

Research Associate II / Sr. RA. – Candidates must have a BS degree and 2-4 years biotech / pharmaceutical experience. Duties include HPLC and wet chemistry analysis, method development and validations, protocol writing, and the designing of experiments. Candidates must have experience in a GMP environment.

Quality Control Analyst – Various positions available in both San Diego biotech / pharmaceutical companies. Candidates need a BS degree in any life science and 0-3 years experience. Duties include routine quality control testing on raw materials and finished products, various biological assay testing, and in-process testing. GMP experience preferred.

Molecular Biologist – Candidates must possess a BS/MS degree in Molecular Biology/Biochemistry/Biology and have 0-3 years experience. Duties will include PCR analysis, DNA sequencing, cloning, SDS-PAGE, western blots, and ELISA assays.

Clean Room Technicians – A local La Jolla pharmaceutical company has 3 immediate positions available in their clean room facility. Candidates must have a minimum of 6 months industry experience within a clean room environment (prefer class 100 exp.) GMP experience is also needed.

QA Associates – Responsibilities include auditing, documentation control, good organizational skills, BS Degree or equivalent, 1-7 years experience, current GMP and FDA familiarity.

To inquire about the above opportunities AND many other opportunities in ALL scientific disciplines – Chemistry, Biology, Biochemistry, Microbiology, Molecular Biology, Chemical Engineering, please call (858) 622-9005, Fax to (858) 622-9048, E-Mail to John.Elsom@yoh.com
Website – www.yohscientific.com

Job Posting - Clarity BioSciences, Inc.

Title: Research Scientist

Location: San Diego, CA USA

Description: Part-time position with responsibilities including design and execution of experiments for molecular identification of eucaryotic genomes.

Qualifications: PhD degree with 0 to 3 years postdoctoral experience in molecular biology, including PCR, cloning and DNA sequencing.

Experience in industry preferred.

Excellent analytical, oral and written communication skills are key.

Respond:
via email (no attachments)
hr@claritybiosciences.com
via mail
Clarity BioSciences, Inc.
10835 Altman Row, Suite 200
San Diego, CA 92121
Attn: JobCode @@@

Volunteer Opportunity

Coaches needed for Science Olympiad Team

AWIS member and Kroc middle school science teacher, Diana Hussey, has organized a team to compete in the Science Olympiad. The Science Olympiad is an annual competition that consists of a series of individual and team events which students prepare for during the year. The purpose of the tournament is to promote the study of science. Volunteers are needed to help students prepare for the competition scheduled for February.

For more information contact Diana Hussey by e-mail address: dhussey@mail.sandi.net

Posting Jobs in the AWIS newsletter: Contact Elaine Weidenhammer at eweiden@nanogen.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 December 1, 2000. If submitting by snail mail, include the words ATTN: Elaine Weidenhammer on the bottom left corner of the envelope.

Non-AWIS Events

Oct. 30 -31
CalBioSummit
Hosted by BIOCOM/San Diego, UCSD Connect
Oct. 30 Career Fair Sponsored by BioSpace.com (Free to attendees.) Location: San Diego Convention Center. Info: www.calbiosummit.org
Historical Profile continued from page 1:
Dr. Bascom died in 1945, but her research on the geology of the Piedmont is still valued by scientists working in that area. Her most powerful legacy, however, may be the young female geologists she trained at Bryn Mawr. Through these women, whom she called “a credit to the science of geology,” Bascom has had a profound and lasting impact on geological research in the U.S.

IMPORTANT INFORMATION ABOUT

San Diego Chapter
Voice Mail: (619) 687-5580
Website: http://awis.npaci.edu
E-mail: sdawis@san.rr.com
Mail: AWIS, San Diego Chapter
PO Box 178096
San Diego, CA 92177-8096

National Chapter
Telephone: (202) 326-8940
Web Site: http://awis.org
E-mail: awis@awis.org
Mail: AWIS National
1200 New York Avenue, NW, Suite 650
Washington, DC 20005

IMPORTANT CONTACTS

<table>
<thead>
<tr>
<th>Committee</th>
<th>Contact</th>
<th>E-mail address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Membership</td>
<td>Susan Jennings</td>
<td><a href="mailto:sdawis@san.rr.com">sdawis@san.rr.com</a></td>
</tr>
<tr>
<td>Newsletter</td>
<td>Barbara Armstrong</td>
<td><a href="mailto:baawis@nethere.com">baawis@nethere.com</a></td>
</tr>
<tr>
<td>Publicity</td>
<td>Elaine Weidenhammer</td>
<td><a href="mailto:eweiden@nanogen.com">eweiden@nanogen.com</a></td>
</tr>
<tr>
<td>Events</td>
<td>Marcelle Vogel</td>
<td><a href="mailto:marcelle@biospace.com">marcelle@biospace.com</a></td>
</tr>
<tr>
<td>Outreach</td>
<td>Anna-Maria Hays</td>
<td><a href="mailto:haysam@scripps.edu">haysam@scripps.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AWIS Board</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Sharon Wampler</td>
<td><a href="mailto:Sharon_Wampler@yahoo.com">Sharon_Wampler@yahoo.com</a></td>
<td></td>
</tr>
<tr>
<td>Dr. Elaine Weidenhammer</td>
<td><a href="mailto:eweiden@nanogen.com">eweiden@nanogen.com</a></td>
<td></td>
</tr>
<tr>
<td>Linette Edison</td>
<td><a href="mailto:linette.edison@advancedtissue.com">linette.edison@advancedtissue.com</a></td>
<td></td>
</tr>
<tr>
<td>Cathleen Pena Davies</td>
<td><a href="mailto:cdavies@mcc.miracosta.cc.ca.us">cdavies@mcc.miracosta.cc.ca.us</a></td>
<td></td>
</tr>
<tr>
<td>Dr. Kim Barrett</td>
<td><a href="mailto:kbarrett@ucsd.edu">kbarrett@ucsd.edu</a></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advisors</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bylaws</td>
<td>Denise Hickey</td>
<td><a href="mailto:dhickey@collateralthx.com">dhickey@collateralthx.com</a></td>
</tr>
<tr>
<td>Membership</td>
<td>Susan Jennings</td>
<td><a href="mailto:sdawis@san.rr.com">sdawis@san.rr.com</a></td>
</tr>
<tr>
<td>Treasurer</td>
<td>Mesliissa Cunningham</td>
<td><a href="mailto:melissa@gen-probe.com">melissa@gen-probe.com</a></td>
</tr>
<tr>
<td>Website</td>
<td>Sharon Cherf</td>
<td><a href="mailto:cherf@qualcomm.com">cherf@qualcomm.com</a></td>
</tr>
</tbody>
</table>

Moving? Address Change?
Please notify us of your new address so you won’t miss our mailings! E-mail Susan Jennings at: sdawis@san.rr.com, phone the AWIS voicemail: (619) 687-5580, or mail changes to AWIS - San Diego, PO Box 178096, 92177-8096.

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.

Nov./Dec. Newsletter staff:
Cathy Manner Barbara Armstrong Christine Haws
Janice Payne Toby Tam Susan Brown
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 December 1, 2000.