The streptococci are a ubiquitous group of bacteria responsible for diseases such as nephritis, scarlet fever, and pharyngitis ("strep throat"). Although the earliest description of the organisms dates back to 1879, much of our current understanding is based on the pioneering work of Dr. Rebecca Lancefield at Rockefeller University in the first half of this century. Dr. Lancefield studied the streptococci for almost 60 years and developed a classification system that is still used today.

Dr. Lancefield was born Rebecca Price Craighill in 1895 in Fort Wadsworth, NY. After a nomadic childhood as a military dependent, she entered Wellesley College in 1912. It was there that she first developed her lifelong interest in science. Initially planning to major in English and French, she switched to zoology and earned her B.A. in 1916. After leaving Wellesley, she taught physical geography for a short time at a girls' school in Vermont. She then returned to school and earned an M.A. in bacteriology from Columbia University in 1918. While studying at Columbia, she met and married Donald Lancefield, a fellow scientist.

Her first position following graduation was as a research assistant at Rockefeller University (then called Rockefeller Institute). She was assigned to the hemolytic streptococcus study headed by O.T. Avery and A.R. Dochez, two of the institute's eminent researchers. At the time, nobody had developed a satisfactory means of classifying the various streptococcal strains, which would be an important first step in understanding the mechanisms by which the streptococci cause disease in their human hosts. Dr. Lancefield examined 120 cultures of streptococci and demonstrated that the bacteria could be divided into at least four immunologically distinct types. This work was published in 1919, and was subsequently confirmed by other investigators.

After the streptococcus study ended in 1919, Dr. Lancefield spent the next few years teaching bacteriology and working in the field of Drosophila cytogenetics. She returned to streptococcus research in 1922, when she enrolled in Columbia University's bacteriology Ph.D. program. Her thesis project focused on Streptococcus viridans, which was believed to be responsible for rheumatic fever.

Dr. Lancefield completed her degree in 1925 and returned to Rockefeller to expand on her previous streptococcal work. She developed immunological assays to distinguish between the different types of strep bacteria and characterized the antigens specific to each group. She was eventually able to classify more than 60 streptococcal strains into five distinct groups, named A through E. She determined that streptococci in group A were responsible for most acute human infections, while those in distinct groups, named A through E. She determined that streptococci in group A were responsible for most acute human infections, while those in distinct groups, named A through E. She determined that streptococci in group A were responsible for most acute human infections, while those in distinct groups, named A through E. She determined that streptococci in group A were responsible for most acute human infections, while those in distinct groups, named A through E. 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IMPORTANT INFORMATION ABOUT

SAN DIEGO CHAPTER
Voice Mail: (619) 687-5580
Web Site: http://awis.npaci.edu
Email: sдавis@san.rr.com
Mail: AWIS, San Diego Chapter
P.O. Box 178096
San Diego, CA 92177-8096
For membership information: Send an email, leave a message on voice mail, or log onto our web site.

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

IMPORTANT CONTACTS

Committees          Email Address
AWIS Database       sдавis@san.rr.com
Outreach            sleef@biomail.ucsd.edu
Scholarship         tkr@beckman.com
Newsletter          bawis@access1.net
Publicity           eweiden@nanogen.com
Events Planning     mferrar1@san.rr.com

Board Members
Marcelle Vogel      marcellevogel@usa.net
Dr. Sharon Wampler  Sharon.Wampler@yahoo.com
Dr. Elaine Weidenhammer eweiden@nanogen.com
Linet Edison        linet.edison@advancedtissue.com
Cathleen Pena Davies cdavies@mcc.miracosta.com
Dr. Kim Barrett     kbarrett@ucsd.edu

Advisors
Bylaws              dbickey@collateralith.com
Membership          sдавis@san.rr.com
Treasurer           melissac@gem-probe.com
Website             sherf@qualcomm.com

San Diego Chapter Welcomes the Following New Members:
Fan-Li Chou, The Scripps Research Institute
Dana Ebbets-Reed
Colleen McKiernan, The Scripps Research Institute
Paige Melhaff
Cheryl Munday
Donna Perdue Knobbe, Martens, Olson & Bear
Ronda Schreiber, Advanced Tissue Sciences
Helga Stark
Mary Wormsted

AWIS Members – “On the Move…!”
Ann Giammona is now a Senior Scientist at GeneFormatics, Inc., which applies proprietary algorithms to predict protein structure and function from gene sequences.

Lauren Chaney Jennings (future member) was born on March 30, 2000 to Susan Jennings, our membership database chair. Welcome Lauren.

Keep in Touch
If you would like to be on our AWIS-San Diego email list and receive AWIS information between newsletter mailings, please send a message to sдавis@san.rr.com. Use “Subscribe to AWIS email” as the subject line and include your full name in the body of your message.

Moving? Address change? Please give us your new address so you won’t miss our mailings! You may email Susan Jennings at sдавis@san.rr.com, leave a message on AWIS voice mail: (619) 687-5580 or mail changes to the AWIS-San Diego, P.O. Box 178096, San Diego, CA 92177-8096.

Posting Jobs in the AWIS newsletter: To post a job in the AWIS newsletter, contact Barbara Armstrong via e-mail: baawis@access1.net, or snail-mail: AWIS PO Box 178096, San Diego CA 92177-8096. AWIS will request a donation of $25.00 per posting to offset the cost of printing and mailing. Deadline for inclusion in the May/June newsletter is June 2. If submitting by snail mail, be sure to write Attn: Newsletter Editor on the bottom left corner of the envelope.

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CAREER NEWS

Life Sciences Career Fair
"Biotech Beach 2000: Binding the Beach and the Net"

BioSpace is sponsoring a Career Fair in San Diego on May 20, 2000, 10:00 am - 4:30 p.m. at the Town & Country Hotel, Mission Valley. Admission is free for job seekers.

For more information and free registration, please see http://www.biospace.com/calendar/detail. For company exhibitors or sponsorship information, please contact Marcelle Miller-Vogel at marcelle@biospace.com or (858) 674-9669.
GALA PHOTOS by Amena Rahman

From left to right: Olivia Montano, Tina Kuus-Reichel, and Melissa Cunningham.

Anita McElroy, winner of the Pam Surko scholarship prize.

Spring Gala
By Janice Payne

The second spring gala was held on April 8, 2000 in conjunction with fund-raising efforts for our scholarship program. The evening began with a reception in the ballroom at the House of Hospitality in Balboa Park. John Moore, a linguistics professor at UCSD, was our flamenco guitarist during the reception. An elegant dinner and our featured speaker, Dr. Kurt Bernischke, followed the reception. Dr. Bernischke is the current president of the San Diego Zoological Society and founder of the Center for Reproduction of Endangered Species (CRES). He brought along a cast of armadillos and had several very entertaining stories about his research efforts at the zoo. Following his presentation, the scholarship winners were introduced. This year, SAIC gave a special scholarship in the name of AWIS member, Dr. Pam Surko. Dr. Surko presented the award to the winner, Anita McElroy of UCSD. The other two scholarship awards went to Bonnie Peterson, a graduate student at SDSU, and Megan Tatreau, an undergraduate at MiraCosta College. Then it was time for dancing to the music of Motel Swing. Rumor has it that two couples were seen on the dance floor.

This year marks the third year that AWIS San Diego has awarded scholarships to local undergraduate or graduate women interested in careers in science. A total of nine scholarships have been given since the program began. Our fundraising committee did an excellent job this year, and they were able to raise $9,000 for future scholarships. Many thanks to our scholarship committee members and to all of our sponsors.

Thanks to the sponsors!

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**Silver Level**
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- Aurora Biosciences Corp.
- Hybritech Incorporated
  (subsidiary of Beckman Coulter, Inc.)
March AWIS Event
Working with a Biomedical Recruiter
By Janice Payne

"I'm in a meeting, can I call you back?" That's the line I used the last time a recruiter called me at work. If that sounds familiar, you may want to reconsider the next time you get a call from a "headhunter." Headhunters can be valuable sources for advancing your career, especially if they specialize in the sciences.

Barbara Coleman, who presented at the March AWIS event at Gen-Probe, is a biomedical recruiter with MSI International in La Jolla. She was also a moderator of the Career Management workshop at the 1999 Women in Bioscience conference. Barbara earned a B.S. and M.S. in Microbiology from the University of Maryland and a Ph.D. in Pharmacology from Cornell. Her postdoctoral work was done at UCSD. Barbara decided to leave the lab, but she wanted to work with people and make use of her science background. Becoming a biomedical recruiter was an ideal opportunity.

During her presentation, Barbara described what each of the three parties involved (client, candidate, and recruiter) should expect once they establish a relationship. The company seeking to hire a new employee is the client, and they pay the recruiter's fee; there is no charge to the candidate. The client uses a recruiter to save time and find a candidate with appropriate skills. The client should expect service and confidentiality from a recruiter.

A recruiter would be most helpful to a candidate wishing to advance in their current career track rather than those wishing to make a career change. The candidate should expect the recruiter to present real job opportunities and only send out a resume after the candidate has given approval. Everything should be done on a confidential basis. In return, the candidate should be open and honest with the recruiter about all aspects of the job search.

If you are interested in finding out how Barbara Coleman can help with your career, you can reach her at MSI at (858) 546-2890.

Career Opportunity

An AWIS member has an opportunity for a post-doctoral level academic researcher who is interested in learning more about biotechnology from the business side. This is a part-time/ad hoc position that would involve the evaluation of commercial potential or competitive advantage of various companies' technology platforms. The time commitment would be no more than a few hours a month. This project would provide a gratis subscription to a well-regarded, daily biotechnology newspaper. Interested parties should contact Karen Martell, Ph.D., Director, Scientific and Business Projects, A.M. Pappas & Associates. Email: kmartell@ampappas.com. Telephone: (650) 330-1861.

Nanogen, Inc. is an entrepreneurial biotech company with headquarters in San Diego. We're working at the interface of microelectronics and biology to develop exciting new applications for medical diagnostics and drug discovery. Nanogen provides competitive salaries and benefits. Nanogen is an equal opportunity employer, and promotes diversity throughout its workforce.

Open Positions as of April 14, 2000
Please include job code number(s) with any correspondence.

Senior Polymer Chemist - AWIS9973
PhD in Materials Science, Chemistry or Chemical Engineering with 5+ years industrial experience in porous materials, commercial polymers used in medical devices, thin-film coating techniques, bioconjugate chemistry for oligonucleotides, pilot-scale manufacturing and commercial product introduction.

Research Scientist/Product Development - AWIS0028/13
PhD with 2+ years experience in molecular biology or related field. Proficiency in nucleic acid isolation, purification, and amplification, as well as experience in cellular RNA expression analysis, restriction enzyme and DNA polymerase kinetics required; microarray experience strongly preferred. Experience with computer programming, biological statistical analysis, and fluorescent chemistry and labeling techniques desired.

Research Associates/Product Development - AWIS0028
Qualified candidates will possess a BS/MS in molecular biology, biochemistry, or biology with at least 2 years experience. Technical expertise with nucleic acid assays, nucleic acid purification, analysis and gel electrophoresis is required. Prior experience with nucleic acid hybridization, assay development and/or cell analysis techniques is desired.

Research Associate/Advanced Research - AWIS0035
B.Sc. OR M.Sc. in chemistry or biochemistry preferred. 0-3 yrs. industrial experience. Strong math and analytical skills required along with basic computer skills, e.g. MS office. Familiarity with DNA, PCR, UV/vis spectroscopy and PAGE electrophoresis desirable.

Research Associates/Assay Development - AWIS0029
BS/MS in molecular biology or biochemistry. The successful candidate will have two or more years' experience in molecular and cell biology. Desired skills included experience in general nucleic acids-based molecular biology including quantitation, hybridization analysis, probe design, amplification methods, fluorescence imaging, and computer skills.

Semiconductor Engineer - AWIS99064
Seeking an experienced engineer to be responsible for development of semiconductor technology for biosips. Successful candidate will have broad hands-on knowledge of semiconductor processes as well as experience in managing outside foundries. MEMS experience a plus. Requires BS/MS and 5+ years' experience in silicon design and fabrication plus good oral and written communication skills.

Employment Opportunities