

MetroNYAWIS Bulletin

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Association for Women in Science

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From the President:

Kathleen Nolan, Ph.D.
Chair, Biology and Health Promotion,
St. Francis College, Brooklyn, NY

A new national president should hopefully bring an increased attention to science, and especially women and minorities in science. We are in need of a diverse workforce and an infusion of new ideas to help solve our many problems, including environmental ones. This issue, the first that we are e-mailing extensively instead of mailing, contains articles that describe science clubs, a book review of "Adam's Curse", a description of events at St. Francis College, and a piece about a girls' mentoring workshop at the newly-opened Intrepid Sea, Air & Space Museum. Let us continue to be intrepid ourselves in our pursuit of gains for all, especially women in the sciences.

VOTE FOR NEW BOARD MEMBERS IF YOU ARE AN AWIS MEMBER! SEE SEPARATE ATTACHED FORM!

**PUT APRIL 4TH ON YOUR CALENDAR!!
FREE CAREER DAY AT ST. FRANCIS COLLEGE:
8:30 A.M.---NOON---BREAKFAST INCLUDED**

**FIND OUT ABOUT: PHARMACEUTICALS,
BIOTECHNOLOGY, CHEMICAL ENGINEERING,
PATENT LAW**

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Connecting with your Inner Nerd in NYC

Jennifer O'Brien, Ph.D.
Intra-Cellular Therapies, Inc.

Around the entrance, many young people in their 20s and 30s stood chatting or checking their phones. Inside was a small, dark bar where surprisingly fashionable people got their drinks, took what seats they could find, and waited for the show to begin. Here in the land of finance and fashion, we waited for **Nerd Nite**, a monthly gathering of geeks sharing their research. Like the atmosphere, the talks are lighthearted and fun, despite their serious content. It is obvious the speakers love what they do and are excited to share their work with the interested and attentive audience. And not only is everyone there to learn, but they are there to mingle, like at any other bar in Manhattan. When one thinks of New York City, science is not typically the first thing to come to mind. But it is the home to some of the top research institutions in the country and home to multiple Nobel laureates. It should not be surprising that there are multiple events like Nerd Nite hidden around the city. The **Secret Science Club** in Brooklyn and **Cafe Science** in Morningside offer talks by established scientists in the bar setting. **Pharma Kharma Club** and the **Nature network** offer purely social events for meeting fellow scientists. If you are a small company looking for an opportunity to publicize your ideas, try **NYC Bio**. Their goal is to provide an event for general networking and for linking venture capitalists and entrepreneurs. For a pure science experience, the **American Museum of Natural History** regularly holds talks. During normal museum hours, a video production in the New Hayden Planetarium in the Rose Space Center plays. But for an after-hours lecture, the planetarium was put to full use as a map of the universe, complete with the latest photos from the Mars rovers. And once a month with **One Step Beyond**, the center becomes like a club with music and drinks. A great summary of all the science-related goings-on in the city can be found on the **Science & the City** website run by the New York Academy of Sciences. Another place to find science groups is through meetup.com. Time to get out of the lab and meet your fellow nerds!

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www.flyawaycafe.com/.../

Greater Opportunities Advancing Leadership and Science

G.O.A.L.S. Mentoring Girls Program at the Intrepid *Kathleen Nolan*

Shay Saheem, Education Director at the Intrepid, invited women to bring career materials to this mentoring workshop for girls, and to share our stories with them. I was assigned to mentor three young women—two were from the South Bronx and one was from East Harlem. They were part of a group of three hundred girls who hailed from Young Women Leadership Academies in New York. These public single-sex schools are a fairly new phenomenon and the girls are required to wear uniforms, of which they are quite proud. I asked the girls what their career aspirations were: Michelle, pediatrician; Lisette, lawyer and medicine; Karina, music. We went to work with our three-fold poster board, colored markers and post-its and made a collage of our aspirations, and strengths. Soon words such as “creative”, “courage”, “Honesty”, “sports” and “music” were covering the board. “Let’s get more specific”, I said. Notes started appearing that said, “I write poems”, “I play baseball”, “I am a good friend”, “I would like to learn thirteen languages”, We were having so much fun with our “Thoughts and Dreams” board, that we almost missed the next phase of the program, the talk by the philanthropy director of Motorola, the company that funded the program. Motorola built the first cell phones, and was the first to install radios in cars.

The girls received certificates, T-shirts and Intrepid mugs, and then took a tour of the ship. The most sinister-looking item on the ship was the all-black spy plane—evocative of Darth Vader. Even though the Intrepid was used in wartime, we all hope that these

future young scientist/engineers and citizens will design future instruments of peace!

Fall Events at St. Francis College *K. Nolan*

The National Organization of Black Chemists and Chemical Engineers (NOBCCChE) (northeast chapter) held a conference at St. Francis College Nov. 14-15. It was a resounding success with over 100 attendees, many of them minority high school and college students. The energy was palpable, and everyone seemed to be having a good time. One of my favorite talks was about the way people think about traditional medicines—oftentimes there is no science to it: people take them because of cultural reasons! Dr. Evelyn Wolfe was the first person at St. Francis College to join NOBCCChE, and she has brought many students to the national conferences over the years. Dr. Filomena Califano was the chief organizer of the conference at SFC.

Fall Back into Summer (Biology) and Chemistry and Physics Department presentations

Quite a variety of student research projects were presented at these two symposia, and included ecological studies of shrimp, the effect of juices on enteroviruses, the concentration of arsenics in estuarine shrimp, and the amount of dissolved oxygen in the Gowanus Canal. Some of the students also presented posters at the Metropolitan Association of University Biologists Annual Conference at Montclair State University on November 1, 2009.

Degree Profile: Environmental Engineering—from Sloan Career Cornerstone

Environmental engineers develop solutions to environmental problems. They are involved in water and air pollution control, recycling, waste disposal, and public health issues. Environmental engineers conduct hazardous-waste management studies in which they evaluate the significance of the hazard, offer analysis on treatment and containment, and develop regulations to prevent mishaps. They design municipal water supply and industrial wastewater treatment systems. They conduct research on proposed environmental projects, analyze scientific data, and perform quality control checks. They provide legal and financial consulting on matters related to the environment. Environmental engineers are concerned with local and worldwide environmental issues.

**BOOK REVIEW: ADAM'S CURSE: A
FUTURE WITHOUT MEN BY BRYAN
SYKES (2003) KATHLEEN NOLAN**

This very humorous book written by a Welsh wit traces the Y chromosome throughout history. Sykes finds that he is related to half of the Sykes men in Yorkshire because of the similarity of their Y chromosomes. His hypothesis is that men will die just thousands of years from now because the Y chromosome has become so truncated and that it will continue to lose genes. The author has some funny chapters about sexual selection, albeit there are serious parts in the book. A very enjoyable and understandable read. I just hope it's not true! What would we do without them??

CALENDAR OF EVENTS

**SCIENCE CAREER DAY: IS THERE LIFE AFTER COLLEGE?
YES!!**

PLACE: ST. FRANCIS COLLEGE

WHEN: APRIL 4, 2009 8:30 A.M.-12 NOON

Learn about careers in biotechnology, chemical engineering, and patent law.

AMERICAN CHEMICAL SOCIETY NATIONAL MEETING

Place: Salt Lake City, UT, USA

When Sunday, March 22 - Thursday, March 26, 2009

**57TH ANNUAL UNDERGRADUATE RESEARCH
SYMPOSIUM==ACS**

PLACE: PACE UNIVERSITY, PLEASANTVILLE, NY

WHEN: SATURDAY, MAY 2ND

Nerd Nite

<http://www.nerdnite.com/NerdNite/NerdNiteNYC.html>

Secret Science Club

<http://secretsscienceclub.blogspot.com/>

Cafe Science

http://alumni.columbia.edu/learn/s3_6.html

Pharma Kharma Club

<http://pharmakarmaclub.org/default.aspx>

Nature network

<http://network.nature.com/groups/nyc/forum/topics>

<http://network.nature.com/groups/nycpostdocs/forum/topics>

NYC Bio

<http://www.nycbio.org/>

American Museum of Natural History

<http://www.amnh.org/>

Sonic Vision

http://www.amnh.org/rose/dome/?src=h_h

One Step Beyond

<http://www.amnh.org/rose/specials/index.php>

Science & the City

<http://www.nyas.org/snc/>

A site to find groups of every type.

<http://www.meetup.com>

GREAT AMERICAN SMOKEOUT

*Irina Ellison, Ph.D. St. Francis College
Assistant Professor of Biology*

On November 20th, students, faculty and staff at St. Francis College joined thousands of smokers across the country who participated in the Great American Smokeout, a national event sponsored by the American Cancer Society in which smokers are challenged to quit smoking for a 24-hour period in the hopes of promoting long-term cessation. The second-annual event at St. Francis College included the distribution of free 6-week supplies of nicotine replacement therapy patches from the Brooklyn chapter of the American Cancer Society to all those who committed to quitting for the day and the distribution of free "commit to quit" kits to all quitters. In addition, various resources and information were available to all those interested in either quitting or assisting others in quitting. The days' events culminated in a karaoke sing-off to exercise healthy lungs.

Smoking continues to be the number-one preventable cause of disease in the US. Although not all smokers will be diagnosed with lung cancer, of those who have been diagnosed, approximately 90% are smokers. Although smoking has seen an overall decline over the past ten years, the number of smokers continues to grow in populations that have not been fully educated about the health risks of smoking. In addition, encouraging women smokers, particularly young adults, to stop smoking continues to be a challenge.

A Team of Five Students and a Coach in Rochester, the Cold Town

Filomena Califano, Ph.D.

Assistant Professor, Dept. of Chemistry and Physics

The U.S. Department of Energy (DOE) National Science Bowl, which originated in 1991, is a nationwide academic competition that tests students' knowledge in all areas of science. High school and middle school students are quizzed in a fast-paced question-and-answer format similar to Jeopardy. Competing teams from diverse backgrounds are comprised of four students, one alternate, and a teacher who serves as an advisor and coach.

The New York Science Bowl is a highly visible educational event and academic competition among teams of high school students who attend science seminars and compete in a verbal forum to solve technical problems and answer questions in all branches of science and math. The regional and national events encourage student involvement in math and science activities, improve awareness of career options in science and technology, and provide an avenue of enrichment and reward for academic science.

To ensure that today's brightest students become tomorrow's scientific leaders, former President Bush announced the American Competitiveness Initiative (ACI) in 2006. This initiative increases investment in research and development, strengthens science and math education, and encourages entrepreneurship and technology discovery.

The DOE National Science Bowl exemplifies how children who are engaged, encouraged, and equipped with proper resources can succeed academically. The goal of the American Competitiveness Initiative—and the National Science Bowl—is to invest in our next generation of scientists, engineers, and educators so America can remain at the forefront of innovation and successfully compete in the 21st century global marketplace.

The regional US 2009 DOE Science Bowl was held in Rochester, NY, at the Rochester Institute of Technology (RIT) on Saturday, January 31st. Teams representing 24 high schools from across the New York State competed in the Regional Finals.

Placing second in the DOE Regional Science Bowl Division I was the NY/NJ NOBCCHE Queens Bridge to Medicine Program from New York, NY. Team members include: Jamal Cole, Carlos Vaca, Shauna Key Rhooms, Tahirat Nasiru, Anderson Antoine and coach Dr. Filomena Califano, Assistant Professor of Chemistry and Physics of St. Francis College, NY.

"I am very proud of every student of my team that participated in the exhilarating Science Bowl competition and above all want to congratulate them," said Dr. Filomena Califano, coach and advisor. "I am honored to teach chemistry to these students.

The Rochester Science Bowl has been a fun learning experience for my students who have a passion for math, science and technology, and the competition highlights the wide array of New York career opportunities for students dedicated to these fields of study."

The New York City team was able to answer a variety of questions on astronomy, physics, math, earth science, and computer science.



NY/NJ NOBCCHE Queens Bridge to Medicine Team. From the left to the right: Anderson Antoine, Carlos Vaca, Tahirat Nasiru, Jamal Cole, Shauna-Key Rhooms

