

Sigma Delta Epsilon/Graduate Women in Science

# Xi Chapter Newsletter

Tuesday, January 13th, 2009

## Quality Bicycle Products in Bloomington, Minnesota Sustainable, Healthy Workplace Environments

Registration/Social 5:30-6:00

Tours & Appetizers 6:00-7:00

Presentation 8:00

6400 W. 105th St, Bloomington, MN

[www.qbp.com](http://www.qbp.com), under 'contact us' for a map

This month we are taking a field trip to **Quality Bicycle Products** in Bloomington, Minnesota, where we will have a wine sampling and hors d'oeuvres, a tour of the building, and a presentation entitled "LEED Certification, Tenant Improvements, Workplace Productivity" by building designer **Rachelle Schoessler Lynn**.

**Rachelle Schoessler Lynn, ASID, CID, LEED® AP**, co-founder and partner of Studio 2030, is an Interior Designer in her 18th year of professional practice. A nationally recognized speaker on ecologically responsible design, Rachelle has made environmental and socially-minded strategies the foundation of her award-winning work. She serves on the licensing board for the State of Minnesota and chairs the **National Sustainable Design Council for American Society of Interior Designers (ASID)**. Rachelle is a frequent lecturer on sustainable design, indoor air quality, workplace issues and material development. She is an adjunct faculty member at the University of Minnesota and a board member of the College of Design's Advisory Board for Iowa State University. Her project credits include the Quality Bicycle Products, Norman Pointe II and the Bloomington Hilton Hotel.

Rachelle's presentation will discuss the integrated design process required to for a sustainable strategy to design, build and market buildings that could improve human health and productivity. She will review the broader environmental goals and present ideas for how to achieve these goals as well as discuss the impact design decisions have on water, energy, materials, air quality and waste. She will discuss how to integrate sustainable design strategies into the design process, the cost considerations associated with the practice, and consideration for **LEED CI (commercial interiors)** certification. Many improvements have been made in the availability of sustainable building materials making the reality of a healthy, sustainable tenant workspace attainable.

**QBP - LEEDing the Way** As part of their commitment to a healthier planet, QBP built an earth-friendly warehouse expansion that is certified by the Leadership in **Energy and Environmental Design (LEEDTM) Green Building Rating System**. Established by the U.S. Green Building Council, LEED sets rigorous standards for developing high-performance, sustainable buildings. As a result, they are reducing the amount of electricity, gas and water QBP uses each year, making them 30 percent more efficient than Minnesota building code requires. Outfitted with innovative wastewater technologies, storm-water retention strategies, high-efficiency appliances, and a design that capitalizes on natural light, the building creates a human-friendly environment for everyone who walks through the doors.

Contact Michele Anderson at [ande8303@umn.edu](mailto:ande8303@umn.edu) or 612-618-2548 for information.

Students \$15 Members \$20 Guest \$22

Name: \_\_\_\_\_

Affiliation \_\_\_\_\_

Guest Name: \_\_\_\_\_

Guest Affiliation: \_\_\_\_\_

I am a (circle one): member \_\_\_\_\_ guest \_\_\_\_\_ student \_\_\_\_\_ Total amount enclosed: \$ \_\_\_\_\_

To register, mail check (payable to SDE) and form to: Michelle Anderson, 4131 39th Ave. S., Minneapolis, MN 55406 Registration must be received by U.S. mail by Friday, January 9th.



PLEASE POST

## Save the Date

- ◆ Wednesday, **February 18th 2009**, **Ruth Lynfield, M.D.**, State Epidemiologist, Minnesota Dept. of Health will speak to us about antibiotic resistant bacteria in Minnesota.
- ◆ **March**, TBD
- ◆ **April**, date TBD, **Tracy Twine** will speak about sustainability of biofuels.

## President's Message

Hello, everyone, and **welcome to 2009!** We humans commemorate the passage of time by highlighting particular people, animals, or endeavors. 2009 has been declared the "Year of" many things, but for scientists, three stand out: Year of the Gorilla, International Year of Astronomy, and Year of Science. Can't get much bigger than that!

Several organizations declared 2009 the **Year of the Gorilla** (<http://www.yog2009.org/>): World Association of Zoos and Aquariums and Jane Goodall Institute, as well as Convention on Migratory Species and Great Apes Partnership, both of the UN. The gorilla was chosen to highlight the plight of **all endangered great apes**, and importance of wild population conservation. **Highlights** include practical approaches to gorilla conservation, income alternatives to poaching and logging in the habitat, and education of ecotourism potentials.

**International Year of Astronomy** (<http://www.astronomy2009.org/>) was declared by the International Astronomical Union and UNESCO, to acknowledge the quadricentennial of modern astronomy—Galileo 1st used a telescope and Kepler published *Astronomia Nova* in 1609. The goal is to "help the citizens of the world rediscover their place in the Universe through the day- and night-time sky, and thereby engage a personal sense of wonder and discovery." More than 135 countries signed on to participate, and much is planned in the United States.

Perhaps the most expansive commemoration was declared by the Coalition on the Public Understanding of Science (COPUS) that 2009 will be the **Year of Science**, "a national year-long celebration of science to engage the public in science and improve public understanding about how science works, why it matters, and who scientists are." (<http://www.copusproject.org/yearofscience2009/>), Info and monthly themes: Evolution, Oceans/Water, & Energy Resources.

Here's looking forward to a wonderful Year of Science! – Michelle

## Science Fair Judging Opportunities!!

**The Twin Cities Regional Science Fair** for grades 6-12 will be held on **Feb. 27, 2009** at the University of Minnesota Field House. Opportunities to serve as a judge for middle school or high school levels or both, and/or a paper-reading judge. For registration or information: <http://www.tcrsf.org/forjudges.htm>. The **State Science Fair** will be held at the Crowne Plaza in St. Paul on **March 29-31**. Opportunities to judge are available as well. <http://www.fair.mnmas.org/Volunteers/sfVolunteers.asp>

## November Meeting Summary

**Dr. Jennifer Seffernick**, research associate in the dept of **Biochemistry, Biophysics, and Molecular Biology** at the U of M, was our guest speaker. Jennifer discussed her research on the **bacterial metabolism** of the chemically related compounds atrazine, melamine, and cyanuric acid which are metabolized by multiple enzymes within the amidohydrolase superfamily. Her work studying the metabolism of atrazine, a broadly used herbicide, by pseudomonas sp strain ADP contributed to the use of neutralized bacteria genetically engineered with **high levels** of amidohydrolases to clean up an atrazine spill in South Dakota. She also demonstrated how melamine, an additive used to boost the nitrogen content of pet food and infant formula and later found to be toxic, is metabolized by related amidohydrolases. Comparisons of atrazine and melamine metabolism have helped to discover the evolutionary relationships between the amidohydrolases involved. Lastly, she described how the atrazine biodegradation intermediate cyanuric acid is also a degradation product of chlorinated chemicals used to disinfect swimming pools. Cyanuric acid, however, interferes with the effectiveness of the parent disinfectants. Identifying amidohydrolases which degrade cyanuric acid have led to enzyme-based filters for removal of the compound from water, eliminating the need to continuously drain and replenish pool water.

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## SDE/GWIS National Fellowships – Deadline Jan. 15

GWIS/SDE offers awards to graduate students, post-doctoral fellows, and early stage faculty conducting academic research in the natural sciences, including: physical, environmental, mathematical, computer, life sciences, anthropology, psychology and statistics. There are multiple fellowships available and the exact Fellowships amounts, which range from \$1000 to \$10,000, will be determined by the SDE/GWIS Fellowships Committee. For information and application materials, go to <http://www.gwis.org> and click on "programs" on the right hand side of the page.

Xi members will have an opportunity between Feb. and April to review fellowship applications. Contact Sue Keirstead at [sakeir@umn.edu](mailto:sakeir@umn.edu) to get your name on the list of lucky reviewers now!



## Agnes Hansen Travel Award Winners!

Holly Willis, Human Nutrition PhD student at U of MN will give a presentation about the influence of dietary fiber on satiety, glucose, insulin levels at the Experimental Biology Meeting in New Orleans.

Pabalu Karunadharm, Biochem., Mol. Biol., and Biophys. PhD student at U of MN will give a presentation about disease mechanisms of age-related macular degeneration at a Biology of Aging Gordon Conference in Ventura, California.

Watch this newsletter in the Spring for reports from these students about their experiences.

## Spotlight on a Member

Carol Gross – I currently work at the University of Minnesota in the College of Biological Sciences, as the administrative coordinator for the Master of Biological Science (MBS) Program. This is a flexible graduate program designed for working professionals who want to enhance their knowledge in the biological sciences. Much of my past has been working as a bench scientist in multiple departments and colleges at the U of M. My research background has been very valuable in advising the diverse population of graduate students our program encounters. I, also, work in the Dept. of Biochemistry, Molecular Biology and Biophysics on several web-based projects, including a Biofuels Database, and on a lab-based project resulting in a recent publication (C.Gross, R. Felsheim and L.P. Wackett. 2008. "Genes and enzymes of azetidine-2-carboxylate metabolism: detoxification and assimilation of an antibiotic." J.Bacteriol. 190(14):4859- 4864).

I became a member of SDE/GWIS in 1984 and have attended a majority of the local meetings since then. I served as the Xi Chapter newsletter editor for four years. I currently recommend Xi Chapter meetings to female MBS graduate students who are exploring career options and opportunities.



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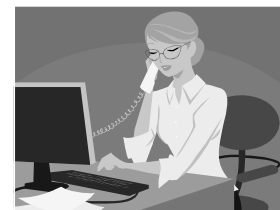
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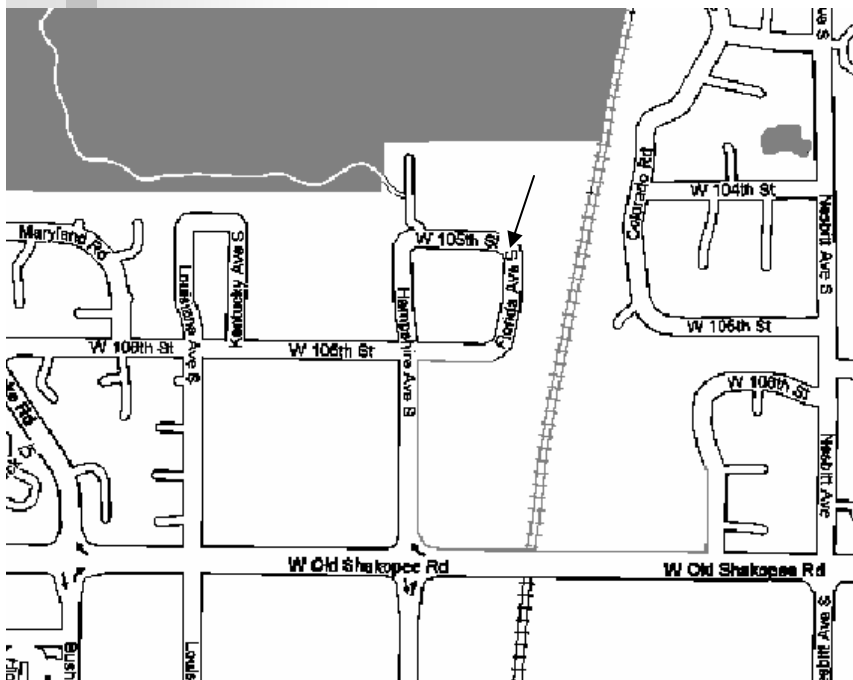
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