

CSB/SJU Biology Department Newsletter

Volume 2 Number 4

October 8, 1998

1. Message from the Chair

Homecoming is always exciting. Although the football game is always fun, I especially enjoy reconnecting with former students and having the opportunity to get to know current students better. It's great fun to work elbow-to-elbow selling brats to ravenous alums, guests and students. Hopefully, we'll see you there, too. And, if it's a good weekend, you can collect some plants – in fact you're welcome to collect all of the buckthorn from the CSB woods as you can carry (see below). But, watch out for the leatherwood. Until next week.....

2. Student News

Sarah Wanner (CSB '98) is working as a technician for a firm in Minneapolis called R&D Systems, which makes lots of reagents for molecular biology labs. It is pretty high-tech stuff like monoclonal antibodies and growth factors for cells. She does a lot of cell culture and assays of the potency of the various growth factors that the company purifies.

Eric Schloe (SJU '98) is in the Physical Therapy program at St. Catherine's.

Erin Hicks (CSB '97) recently returned from a year teaching in China.

Susan Switras (CSB '97) is a graduate student in the Horticulture department at the University of Minnesota. She is also engaged.

Two students worked with Dr. Poff this summer doing summer research:

Beth Holbrook (Jr. Bio. Major) did a pollination study. She studied the pollination biology of *Monarda*, a prairie plant.

Noah Whitman (SJU '98) studied prairie butterflies this past summer and is currently in his 1st year of grad. Study at the University of Missouri.

3. Faculty News

Dr. Manuel Campos (CSB/SJU Biology Department) gave a seminar to the Chemistry Department on protein phosphatases.

Dr. Michael Reagan (CSB/SJU Biology faculty dept.) is giving a lecture in the Biology Department at St. Kate's on Oct. 15 entitled "Genomic Stability, Cancer and Rad27 Protein".

Dr. S. Saupe (CSB/SJU Biology Department) was appointed by the major of St. Cloud, Mr. Larry Meyer, to serve on the Environment and Development Team (EDT) for the Environmentally Sensitive Areas Ordinance in St. Cloud.

4. Curriculum News

No news

5. Biology Club News - *items of interest from the Biology Club.*

Homecoming Brat Sale – Saturday, October 10. If you want to help out, contact Jen Smith or Jacob Hausauer.

Buckthorn-athon – help rid the CSB Woods of buckthorn (*Rhamnus cathartica*) on Sunday October 11th. Join Dr. Gordie Brown and members of the biology club with clippers and pruners to destroy this alien invader. For more information, contact Dr. Brown.

6. Calendar of Events

Oct 10	Biology Department Tours for Homecoming
Oct 10	BioClub Brat Homecoming Brat Sale
Oct 11	BioClub Buckthorn Mania
Oct 13	Scholarship Presentation - Johanna Davis; Science Center; 4:00 pm
Oct 13	The Jay and Rose Phillips Family Foundation scholarship application deadline
Oct 14	Seminar: "Prairies and gopher mounds"; Kelly Wolfe-Bellin, Iowa State Univ.
Oct 15	Michael Reagan's lecture at St. Kate's
Oct 19 (M)	Free Day
Oct 21	Seminar- "Pollution Prevention; Brenda Gassman and Cindy McComas
Nov 5	NSF Graduate Research Fellowship Applications are due
Nov 7	GRE Test Dates
Nov 10	Howard Hughes Medical Institute application deadline
Nov 12	Seminar: Pathogenesis. Dr. Pat Schievert, UM Seminar
Nov 17	CSB/SJU Career Exploration Series presentation on volunteering
Dec 12	GRE Test Date
April 10	GRE Test Date
April 17	MCAT exam

7. Internships/Scholarships/Jobs

Scholarship Presentation - Johanna Davis will give a presentation on where to look for scholarships, how to improve your application and scholarship timelines. This will be held 13 October, 4:00 pm in the Science Center; Room 375. This will be a great opportunity to learn more about scholarships!!!!

**Are you interested in an NSF predoctoral fellowship? Applications are available in Dr. Brown's office.

The *Jay and Rose Phillips Family Foundation* will award 5 scholarships to Minnesota Private College juniors this fall. Applications are available at the Financial Aid Offices at CSB (Main 244) and SJU (Quad 149). **Application deadline is Tuesday, October 13.

**Biology Department Job Page - Don't about this great resource that you can link to it from the biology department home page or go directly to <http://www.users.csbsju.edu/~biology/biojobs.html>.

**Interested in Volunteering after Graduation? The CSB/SJU Career Exploration Series will feature a presentation on November 17, 1998 in Teresa Reception Center, CSB at 7:00 p.m.

**The NSF will award approximately 1,000 new Graduate Research Fellowships to support graduate study in science, mathematics and engineering. For additional information contact the NSF Graduate Research Fellowship Program (nsgrfp@ora.gov).

**The Predoctoral Fellowships in Biological Sciences will award 80 fellowships by the Howard Hughes Medical Institute for full-time study toward a Ph. D. or Sc. D. degree in some biological sciences. The application deadline is November 10, 1998. For copies of the application contact the Hughes Fellowship Program (infofell@nas.edu).

8. Seminars/Lectures/Symposia

Prairie Seminar - Kelly Bellin-Wolfe will be present a seminar on Wednesday, October 14, 1998 entitled, "The role of pocket gopher mound production in shaping the plant community of native prairies". Kelly is a CSB graduate ('94) currently completing a Ph.D. at Iowa State University, Ames. Kelly will meet with prospective students in the Old Science Lounge at 2:30 p.m.

Brenda Gassman and Cindy McComas will present "Pollution Prevention -- A Win-Win Strategy for Business and the Environment" on Wednesday, October 21 at 8:00 pm. at the Anoka Ramsey Community College. The speakers will highlight current pollution prevention initiatives at the state and county levels including MnTAP and metro county business assistance programs and Minnesota's statewide network of Materials Exchange service. For more information, contact Kate Graham.

Dr. Pat Schlievert, a famous microbiologist from the University of Minnesota will present a seminar on Nov 12. The title of the seminar is " Similarities in the mechanisms of pathogenesis of *Staphylococcus aureus*, group A Streptococci, and *Enterococcus faecalis*". For more information, contact Dr. SG Saupe (2782; ssaupe@csbsju.edu).

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Dr. Dwight Nelsen, University of St. Thomas Biology Department, visited the department last week to present a seminar entitled, "Circadian Time Machines: the neural mechanism for resetting the mammalian circadian pacemaker".

9. Miscellaneous

Nobel Prize Buzz - by Dr. M. Reagan, CSB/SJU Biology Department

One of the most exciting things in science happens in October - the announcements of the 1998 Nobel Prize winners. The prize for physiology or medicine, the one that biologists usually win, will be announced on Monday, October 12. Who do you think it will be? What work will it recognize? The buzz around bigshot labs this time of the year is palpable. Will it be yet another researcher from UT Southwestern Medical Center? My bets are on either Steve McKnight, from UTSW, or Emile Unanue, from the Washington University Medical Center in St. Louis. (Just coincidentally, these are the two places I have trained.) Remember, you heard it here first! One thing we can be reasonably sure of - for the 97th consecutive year the winner will NOT be a botanist.

Check out the Nobel web site at <http://www.nobel.se/> on October 12 and see for yourself.

What is the latest threat to forests?

According to an article in the October issue of Conservation Biology, researchers have found that deer populations, if left unchecked, can graze certain plants to extinction in old growth forest fragments. Two researchers studied the effects of deer on old-growth fragments of southeastern Minnesota's deciduous 'Big Woods' forest, which used to cover more than 3000 contiguous square miles. Today all that remains is scattered fragments of 12 square miles or less. While the forest has declined, deer populations have increased steadily over the last 30 years.

[Full Story <http://www.enn.com/news/enn-stories/1998/10/100198/deer29.asp>](http://www.enn.com/news/enn-stories/1998/10/100198/deer29.asp)

Didjknow that.....?

.....a group from North Hennepin Community College will tour our science buildings in late October to get ideas for their new science facility.

..... The gaping hole in the ozone layer over the Antarctic is now three times the size of Australia, the biggest it has ever been. And, according to leading expert, Dr Susan Solomon, ozone will be around for decades to come. Dr. Solomon, a researcher at the National Oceanic and Atmospheric Administration in the United States, said that the ozone hole currently covered an area of about 26million square kilometers.

The ozone hole over Antarctica has grown bigger every year since the late 1980s. Dr Solomon discovered that chemical reactions destroyed the ozone on surfaces such as ice crystals in high-altitude polar stratospheric clouds as well as on atmospheric particles found at high levels in the Earth's atmosphere.

``We're clearly witnessing a major impact on ozone depletion caused by the eruption in 1991 of Mount Pinatubo in the Philippines," said Dr Solomon. Just like polar stratospheric clouds, volcanic particles enable the chlorine from CFC's to become more effective at destroying ozone.

The Antarctic ozone hole and the year-round depletion of the Earth's protective ozone layer will continue until levels of ozone-destroying CFC's and halons drop to pre-1970 concentrations. This is not expected to happen until sometime around the middle of the next century. Already, atmospheric scientists have detected reductions in atmospheric concentrations of a number of ozone-depleting chemicals - a positive sign that the Montreal Protocol is working. The Montreal Protocol is the international agreement designed to protect the ozone layer by phasing out production of CFC's and halons.

10. Frequently Asked Questions: [How can I learn more about scholarship opportunities?](#)

We're glad you asked! This coming week, Johanna Davis will give a presentation about scholarships. Ms. Davis served as Scholarship Director at Washington State University for several years and is an expert in this area. Her presentation on Tuesday, October 13 is not to be missed.

For more information, contact:

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