CSB/SJU BIOLOGY DEPARTMENT NEWSLETTER

Volume 2 Number 7 November 9, 1998

1. Message from the Chair

I just returned from 3 days at the National Association of Biology Teachers Conference in Reno, Nevada. It was a tough assignment, but I was willing to sacrifice for the department. There were some fabulous speakers at the meeting – my favorites were Dr. Mark Plotkin (an ethnobotanist) and Dr. Peter Natanielsz (a developmental biologist). I'll share some of their insights in the next two issues of the newsletter.

Later this week you have the opportunity to attend a presentation by a fabulous speaker, too. Dr. Pat Schlievert, a microbiologist from the University of Minnesota Medical School will be on campus Thursday (Nov 12) to give a presentation (see below) at 4:00 pm in the Science Auditorium. He will also be available to informally meet with interested individuals at 3:00 pm in the Natural Science Museum. This will be a good time to discuss science, graduate school and whatever is on your mind. I hope that you will take advantage of these two opportunities. Dr. Schlievert is one of the world's foremost authorities on gram positive bacteria. He has published over 200 articles and was the first person to recognize that Toxic Shock Syndrome is caused by a bacterium. Dr. Schlievert has been on several news shows including Dateline and has won the Best Medical School Teacher of the Year Award multiple times. Dr. Schlievert's visit is scheduled in honor of the opening of the new Science Building and is part of the Peter Engel lecture series.

2. Student News:

Dante Beretta (SJU '86) donated a large collection of seeds from the Virgin Islands to the CSB/SJU Herbarium.

Sean Knowles (SJU '98) has been selected as a finalist for the 1999 Caribbean Rhodes Scholarship Committee. The completion will be held in Bridgetown, Barbados, from December 6-8. Good luck, Sean!

3. Faculty News

Dr. Stephen Saupe attended the 60th annual meeting of the National Association of Biology Teachers that was held in Reno, NV.

4.Curriculum News

Spring 1999 courses are now available for viewing on WEBSTER - click on the Class Schedule Icon and select Spring 1999. SPRING REGISTRATION BEGINS November 9 & runs through December 4. Remember - there is one biology course change: BIOL 347-01Ainstructor is Dr. J Poff.

5. Biology Club News

none submitted

6. Calendar of Events

Nov 9 Spring Registration begins

Nov 10 Air Force Recruiter – Medical School

- Nov 10 Howard Hughes Medical Institute application deadline
- Nov 12 **Seminar**: Pathogenesis. Dr. Pat Schievert, UM Seminar
- Nov 14,15,16,17 Controlled Deer Hunt in the woods of St. John's
- Nov 16,17, 19, 20 Bloodmobile at CSB/SJU.
- Nov 17 Lecture: "The Natural Step and Sustainability"- Joe Esker
- Nov 17 CSB/SJU Career Exploration Series presentation on volunteering
- Dec 4 Spring Registration ends
- Dec 12 GRE Test Date
- April 10 GRE Test Date
- April 16 Official Dedication of the New Science Building
- April 17 MCAT exam

7.Internships/Scholarships/Jobs

Are you interested in working with the National Park Service?

The US National Park Service is interested in expanding scientific Research in the park system, consistent with the conservation and public service mandates of the parks. Our discussions with leaders of the NPS research effort in Washington have revealed that while individual parks are run fairly autonomously with the interests of the specific park in mind, many parks seek researchers from local colleges and universities to provide baseline and monitoring data of use for park management. Students may be appropriate to do some of this work when properly supervised by faculty and advised by park staff. In order to learn of park needs and research opportunities, one should contact the local park staff. There may also be information on a local Park website. The Park Service is interested in social science work that provides

better knowledge of visitors' expectations and needs. Much of this research falls within the purview of PSYCHOLOGY. NPS specifically has called for extending ties with local universities and colleges to assist in conducting social science research. There is a plan to create a young scientists competition to encourage innovative research by students studying park issues. For information about psychology research in the parks, contact your local park or Dr. Gary Machlis, Visiting Chief Social Scientists, NPS, gmachlis@uidaho.edu.

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There is a new NPS public-private partnership called the **GEOLOGIST-IN-THE-PARKS PROGRAM**. The Parks' Geological Resources Division partners with individual park units, professional societies, academia, and US federal agencies to match geologists with parks that have requested temporary geologic assistance. Each available position is advertised on the program's web site: http://www.nps.gov/grd/geojob/geojob.htm. Participation by undergraduates is welcome in this program. A few of the positions are for seasonal employees, but many are for volunteers. Some stipends are available for students.

Other current areas for research in the parks include environmental sciences, paleontology, hydrology, and climate change. Note that much of the former research activity of the NPS has been moved to the Biological Resources Division of the US Geological Survey. BRD and NPS are currently developing up to four new Cooperative Ecosystem Studies Units to increase university focus on land management issues relevant to the parks. In a later report, CUR will describe BRD activities and opportunities. Undergraduate seniors with an interest National park management may be interested in a program to fund graduate student research in the national parks sponsored by Canon, USA, Inc. and the National Park Foundation along with NPS. Only four awards are made annually, based upon research needs identified by the parks. Interested students preparing for graduate school should contact Dr. Gary Machlis, Program Coordinator for the Canon National Parks Science Scholars Program, at the contact numbers given above.

**BIOLOGY LABORATORY COORDINATOR.

100% time position, Dept. of Biology, University of Minnesota, Duluth (UMD). Applicants must have

bachelors degree in biological sciences and experience in lab management or support; masters degree in biological sciences preferred. Send letter of application, curriculum vitae, transcripts (copies ok), name, address, and phone number of three references to: Dr. C. E. Firling, Department of Biology, University of Minnesota, 10 University Drive, Duluth, MN 55812-2496. Postmark deadline November 14, 1998. For more information call 218-726-7566

**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.

"Meet Some Pro's!" - this will be a gathering of 16-20 CSB alums, including Beth Clysdale ('94) who is currently working at the MN Pollution Control Agency. The alums will be available to talk with CSB/SJU students about majors, jobs, etc. This activity will be held on Thursday, Nov. 5, 6:30 - 8:30 p.m., in the Alumnae Hall, Haehn Campus Center.

The CSB/SJU Pre-Med. Web Page -http://www.users.csbsju.edu/~premed/. Check it out!

8. Seminars/Lectures/Symposia

Joe Esker from the Minnesota Pollution Control Agency will speak on "The Natural Step and Sustainability" on November 17th at 4:30 in Q360 (SJU). The Natural Step is both an organization and a set of science-based principles developed to help determine the "sustainability' of human activities. Their ultimate aim is to develop human systems that are more in harmony with natural cycles and processes. This talk is sponsored by **Save the Planet**. For more information contact Ernie Diedrich at 320-363-3518 in Engel hall.

Dr. Pat Schlievert, a famous microbiologist from the University of Minnesota will present a seminar on November 12, 4:00 PM, Science Center Auditorium. The title of the seminar is "Similarities in the mechanisms of pathogenesis of *Staphylococcus aureus*, group A Streptococci, and *Enterococcus faecalis*". There will be a reception for Dr. Schlievert from 3:00 - 3:45 in the Natural History Museum. For more information, contact Dr. SG Saupe (2782; ssaupe@csbsju.edu).

Air Force Medical School Recruiter

Concerned about the cost of medical school? Consider the Air Force Health Professions Scholarship. With this scholarship the Air Force will pay all tuition, fees and mandatory expenses at any medical school to which you are accepted. You will receive a monthly stipend of \$938.56 during medical school and the Air Force provides nearly all residencies of choice. Your obligation is to serve in the Air Force as an officer, one year for every year of medical school. For more information attend a presentation by Technical Sergeant Thomas E. Stilin II at 6:00 p.m., 142 Ardolf Science Center, CSB on Tuesday November 10.

9. Miscellaneous

CAUTION: There will be a control deer hunt in the woods of St. John's on November 7, 8, 14, 15, 16, and 17th. Do not enter the woods without blaze orange. A controlled deer hunt is necessary to begin restoring a healthy balanced environment. The overpopulation of deer has resulted in diminished flora in the woods and has negatively impacted insects, songbirds and even other mammals.

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There is a guide to grad school on the Bio home page for those interested in ecology, systematics, etc. Contact Gordie Brown for specific where abouts.

Are you interested in Native Plants? Check out this website at: http://www.dot.state.mn.us/engserv/environment/Newsletters/minnesota roadsid

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DID FUR TRAPPERS TRIGGER LANDSCAPE CHANGES?

Seeds, pollen in sediment yield clues to human impact on ecosystems. When 18th-century trappers trekked through the forests of what is now Baltimore, their minds were on money. They collected beaver pelts because the fur fetched high prices from clothing makers in Europe. At the same time, however, their hunting habits may have dramatically changed the landscape, altering the flow of local streams and the mix of vegetation nearby, new research at The Johns Hopkins University suggests. For more information contact Phil Sneiderman, prs@jhu.edu

Didjaknow...

El Niño offers peek at global warming

If global warming is left unchecked, the impacts of the recent El Niño are just a taste of what is in store for wildlife and the people who depend on it, according to a report from the National Wildlife Federation. Last year, nearly two thirds of California sea lions born in one of America's largest breeding grounds died due to starvation. El Niño warmed waters off of San Miguel Island enough to drive away their food supply.

Full Story http://www.enn.com/news/enn-stories/1998/10/101998/eltollo.asp

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Students use Internet to tackle moose mystery

Two Minnesota radio-collared cow moose, known simply as B8146 and D0982, now have their own Internet home page. B8164 lives at Agassiz National Wildlife Refuge and was captured and collared by researchers in January 1996. D0982, captured in March 1997, is from Red Lake Wildlife Management Area. These two moose are part of the state's Adopt-A-Moose program, designed to help scientists figure out why their populations are declining.

Full Story http://www.enn.com/news/enn-stories/1998/10/101998/moose19.asp

<u>10.</u> Joke of the week: (a new section – submissions are welcome!)

A neutron goes into a bar and asks the bartender, "How much for a beer?" The bartender replies, "For you, no charge."

Thanks to Erika Schoot, Chemistry, for this gutbuster.

11. Frequently Asked Questions: Are there hair follicles on the palms of your hands?"

No. in fact, according to Dr. Carol Ness, M.D. it's about the only place on the body that doesn't.

For more information, contact:

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