



# Palogens

March 2008

Dear Alumni, Emeriti, Colleagues and Friends,

My first year as department head has been busy, challenging and generally enjoyable mainly due to the great people I have to work with. The main office (406), conference room and head's office were treated to new carpet, paint, blinds and some furniture to create a more professional atmosphere. We were also able to give each graduate student access to a computer while upgrading the office staff computers. A costly but necessary renovation project for plant pathology and agronomy and horticulture greenhouses was completed in the summer of 2007. Fortunately, since plant pathology has few options for revenue generation, the Dean covered the costs, and now we should be able to shield our plants from the ravages of global warming even if it is only to kill them anyways.

Jennifer Chaky has left the position of Extension Educator-Plant Pathology and Coordinator of the Plant Diagnostic Clinic to join her husband at Pioneer Hi-Bred International. However, we were fortunate to be able to hire Amy Ziems this past fall as Jennifer's replacement. Amy and Stephen Wegulo have swapped offices to complete the renovations in Extension, at least for the near future.

The Deans and Vice-Chancellor have begun to release some positions that were frozen during our budget shortfalls over the past three years. An advertisement for a molecular fungal-plant interactions assistant professor position has been sent to Science, APS and other outlets. We are looking for an early to mid-career scientist for an 80% research/20% teaching position in plant pathology. Please urge any outstanding scientists you know who have some mycology and plant-microbe background to apply by April 15, 2008. When more faculty positions are released, plant pathology is in line for a virologist and a bacteriologist.

Two faculty members completed sabbatical leaves in 2007. Tom Powers spent six months in Costa Rica working with the University of Costa Rica and other scientists on an NSF-funded diversity study involving nematodes. Loren Giesler spent time away from the office to work on a field crops disease manual. Jim Van Etten is also taking a leave from Plant Sciences Hall to move his laboratory and all associated personnel to the new Virology Center located east of Veterinary Sciences on East Campus. Jack Morris will also be moving his laboratory from Beadle to the Virology Center. We certainly can't fault them for taking advantage of new labs and offices, but we will miss the interaction with students, staff and faculty in plant virology.

The importance of student credit hour generation has never been greater. In addition to recruiting students into our undergraduate major in Plant Protection Sciences, the department is in the process of requesting a name change to Plant Pathology and Microbiology. The addition of microbiology should allow our faculty with other faculty in the Life Sciences to develop an undergraduate microbiology major. As our teaching faculty have been developing a core of graduate courses to efficiently use our small FTE to educate our graduate students, they are also looking for undergraduate courses in addition to PLPT 369 (Introductory Plant Pathology) that will generate student credit hours. A microbiology major would assist us in that endeavor by having our faculty involved in courses required for that major as well as Plant Protection Sciences. Iowa State University now has a Plant Pathology and Microbiology Department that has helped create a microbiology major with nearly 100 students.

It appears that Plant Pathology (initially Anne Vidaver) will be organizing a Doctor of Plant Health program as the proposal to initiate this program will be on the agenda of the Board of Regents this spring. Space, recruitment and curriculum will be Anne's top priorities this spring. Speaking of recruitment, we would like to ask for your help in directing students to our graduate, including Extension Specialty, and undergraduate programs. Plant Protection Sciences is a versatile major with the option to have a double major, and after graduation numerous job possibilities or advancement to graduate school. Contact me and/or Tamra Jackson, our recruitment committee chair, if you find candidates. As we are discussing teaching, I have an announcement that came as a surprise to the department last month. Jim Partridge has decided to retire at the end of this year. As you may or may not know, Jim is 100% teaching and associate director of the Honors Program. CASNR will try to replace Jim's Honors leadership, but the department will miss Jim's leadership, teaching counsel, and teaching FTE, especially the teaching of PLPT 369 where

he uses some innovative methods to help students reach their potential and beyond.

Finally, I want to ask each of you to consider helping the department in establishing a University of Nebraska Foundation account to fund our plant pathology, agriculture and Nebraska tourist highlights tour for our students and staff. We plan to make this tour an annual event (see new experiences section of the newsletter).

I wish you a warm spring and good health.

Jim Steadman

#### Welcome (

Welcome to our new department members: **Jae Behn** - Research Technologist in Dr. Jackson's lab

**Tim Brovont** – Research Technologist in Dr. Giesler's lab

**Dr. Satvanaravana Tatineni** – USDA/ARS virologist faculty

**Serena McCoy** – Research Technologist in Dr. Steadman's lab

**Dr. Les Lane** – scientist in Dr. Van Etten's lab

Welcome to the new arrivals:

Baby boy, Conor, born to **Julie Breathnach**, on October 15, 2007.

Baby girl, Ilianna Aponte-Gonzales, born to **Nancy Gonzales**, on January 6, 2008.

### Farewell;

Employees and friends that have left the Department of Plant Pathology:

Nattihiya Buensanteai – visiting student from Thailand (Dr. Yuen's lab)

**Dr. Cafer Eken** – Visiting scientist in Dr. Yuen's lab and returned to Turkey.

**Kristy Goings** – Accepted a position in the Food Science Department.

**Dan Higgins** – Accepted a position with Pfizer Corporation.

**Dr. Kwong Hong Lee** – Post doc in Jim Van Etten's lab and returned to South Korea.

**Lindsey Otto-Hanson** – Accepted a position at the University of Minnesota Plant Pathology Department on a soybean project.

**Kirsten Powers** – Accepted a position at the University of Nebraska State Museum Botany Collections and Research.

**Dr.** Camile Semighini – Accepted a postdoctoral position with the Cold Spring Harbor Laboratories in New York.

**Susan Shoneweis** – Accepted an internship at Creighton University to complete her Dietetics program.

#### **Students on the Move**

The following students have completed degrees in the Department of Plant Pathology.

Camile Semighini, Ph.D. "The DNA Damage Response of Aspergillus nidulans; links to Programmed Cell Death and Hyphal Morphogenesis"

Advisor: Dr. Steve Harris

**Lindsey Hanson, M.S.** "Phenotypic and genotypic variability in populations of *Sclerotinia sclerotiorum* used to screen for white mold resistance in common bean (*Phaseolus vulgaris*) at major bean production areas in the United States" Advisor: Dr. Jim Steadman

Congratulations Camile and Lindsey!

# Plant Pathology Student Organization

The Plant Pathology Student Organization is hosting Dr. Ralph Dean's seminar on April 22, 2008. Dr. Dean is the Director of the Center for Integrated Fungal Research and the Department of Plant Pathology at North Carolina State University in Raleigh, North Carolina.

The website for the Plant Pathology Student Organization: <a href="http://www.unl.edu/ppso">http://www.unl.edu/ppso</a>.

#### **T-Shirts for Sale**

The Plant Pathology Student Organization had T-shirts designed for the department. Please contact Bill Rittenour (402-472-4596 or WRR114@hotmail.com) to purchase one and support our graduate students – price \$10. A new supply has just been received!

#### **Honors and Awards**

**William Rittenour** – Milton E. Mohr Fellowship for 2007-2008

**Jorge Venegas** – 1<sup>st</sup> Place Winner in Poster Competition, Bean Improvement Cooperative 50<sup>th</sup> Anniversary Meeting

**Dr.** Anne Vidaver – Founders Distinguished Service Award, American Society for Microbiology

**Giane M. Yanai** – Widaman Trust Distinguished Graduate Assistant Award for 2007-2008

# **New Experiences for Students**

The summer of 2007 was filled with new experiences for students in the department.

The department provided undergraduate students in the new Plant Protection

Sciences interdisciplinary program the opportunity to travel to Mexico on a study tour. In addition to agricultural events, such as tours of CYMMIT and visits to pineapple and coffee plantations, students on the trip were exposed to other cultural, economical, historical, and political features of the country.



Graduate students in the department spent a week this summer learning about the agriculture in Nebraska. diversity of Students visited organic vegetable, turfgrass, fruit, tree, specialty crop, ornamental, and row crop commercial production facilities and research and extension centers across Presentations were given by the state. extension and research faculty, U.S. Forest Service scientists, and a commercial grower. Students saw more than 40 different diseases while on the trip and also found time to take in some of the local sites, such as the Panhandle's Chimney Rock and the "infamous" Carhenge.



**New Graduate Assistantship –** 

## **Extension Specialty**

A Graduate Assistantship is available immediately in the Department of Plant Pathology, University of Nebraska – Lincoln, to support a qualified Graduate Student candidate (M.S.) specializing in extension. The assistantship includes a 12 month stipend, tuition waiver and health insurance.

This assistantship offers the opportunity to shadow extension educators, assist in the plant diagnostic clinic, participate in educational programs and integrated plant management workshops, or take leadership/teaching courses in addition to conducting a research project. The successful candidate will become very familiar with extension programming, including impact assessment, with one or more of our four extension specialists.

For more information please contact: James R. Steadman, Professor and Head - Department of Plant Pathology - University of Nebraska, Lincoln, NE 68583-0722. E-Mail: jsteadman1@unl.edu, Phone: (402) 472-3163. Department web site <a href="http://plantpathology.unl.edu">http://plantpathology.unl.edu</a>

#### **Recruitment News**

The Plant Protection Sciences student recruitment committee has been very busy enticing students to our undergraduate program. Plant Protection Sciences is an interdisciplinary program between entomology, plant pathology and weed science allowing students to develop a program for their specific interest but provides the groundwork for an integrated pest management approach in any area. At the end of February, we participated in the UNL Big Red Road Show held at the Omaha Qwest Center. The Big Red Road Show is the largest off campus student recruitment event held in the U.S. It was estimated that approximately 3,000 students and parents participated in the Road Show. This was the first year that the Department of Plant Pathology participated and promoted the undergraduate program in Plant Protection Science and we received contact information from 95 potential students. In addition, we also talked to several other individuals throughout the day about plant diseases. For the road show, new recruitment material was designed and distributed to potential students, including post-it notes, can insulators, and display material. The event was a huge success and we are optimistic about new students joining our program this fall. Below is a photo of some of the volunteers that helped make the Big Red Road Show a success (1-r Jae Behn, Seth Watson, Amy Ziems, Tamra Jackson, Bill Rittenour, Tim Brovont and Steve Harris).



Please see one of us if you have ideas or upcoming opportunities for student recruitment to help us get the word out about this program.

# **Extension News/ Diagnostic Clinic**

**Amy Ziems** has been appointed director of the Plant and Pest Diagnostic Clinic.

The 2007 growing season was very good for Nebraska corn and soybean producers. In October, soybean rust was identified for the first time in the state in four counties in the

southeast corner; however the timing of disease development was good for the soybean producers. At the time of initial discovery, approximately 80% of the soybeans throughout the state were harvested and the fields with soybean rust were in the late reproductive stages, thus no fungicide was needed and no yield losses were reported. The discovery provided an opportunity for extension educators and the technical staff in Lincoln to observe soybean rust and thus will assist them with identification in the future.

The extension plant pathology team is very excited about the re-launching of the plant disease central website (pdc.unl.edu). It was initially set-up and designed by Dr. Jim Stack (currently at Kansas State University) to provide plant disease identification. At the beginning of February, the website was re-launched with a new layout and provides up-to-date disease information on agronomic crops, turfgrass, and landscape plants.



Information on the chemical trials that each of the specialists conducts each year is also available so potential pesticide users can review it when selecting which pesticide to apply. Also included on this site is the link to the Plant and Pest Diagnostic Clinic. The guidelines on how to submit samples to the diagnostic clinic are just a click away! We are optimistic that this will help clients to submit the best possible sample and receive the most accurate diagnosis.

The extension team is looking forward to the upcoming growing season and excited to see what will develop in 2008.

#### Dr. Boosalis' Corner

The department is fortunate to have Dr. Boosalis join us each day. He says he still enjoys working here!