

# PathogeneNews

Winter 2009

Dear Friends, alumni, and colleagues:

HAPPY NEW YEAR!

It has been a busy 2008 for the department. We are fortunate to have a new faculty member, Dr. Richard Wilson, and his wife, Claudia, joining us early in 2009. Because of a projected \$377M deficit for the upcoming 2009-11 biennium state budget, all faculty and staff openings are being scrutinized for relevance to the UNL priorities. Dr. Wilson fills the molecular fungal-plant interaction position. He worked on Aspergillus nidulans while obtaining his Ph.D. in the Department of Infectious Disease at London's Imperial College of Science, Technology and Medicine. He then had a postdoctoral position with Dr. Nancy Keller at University of Wisconsin, Texas A&M and USDA New Orleans working on lipid metabolism in mycotoxin production. His next postdoctoral position was at the University of Exeter with Dr. Nicholas Talbot where he examined the rice blast fungus pathogenesis process. Dr. Wilson will bring the trehalose/Magnaporthe grisea system with him to initiate his research. He has teaching experience that could lead to teaching microbial physiology, biology of fungi and related courses in the area of microbiology as well as host-pathogen interactions. His wife, Claudia, will be looking for an office position to take advantage of her Bachelor's

degree in business administration from Peru and a degree in web design.

I have submitted a proposal to the Academic Planning Committee of UNL to change the name of the department to Plant Pathology and Microbiology. The objective is to provide impetus to establish a microbiology major which has been absent from campus since the Microbiology Department merged with Zoology and Botany to form the School of Biological Sciences in the mid 1970s. Our vision is that a microbiology major with multiple department supervision will provide opportunities to increase our low student credit hour numbers at the undergraduate level. Undergraduate teaching, along with research and the needed grant support, are the top priorities at UNL. Other plant pathology departments with microbiology in their name are UC-Riverside, Texas A&M, and Iowa State while the University of Arizona has a plant pathology and microbiology section in their Plant Science Department.

Thanks to a major effort on the part of Dr. Anne Vidaver over the past few years, we now have a University of Nebraska approved Doctor of Plant Health program. It becomes the third professional degree program in IANR with the Doctor of Veterinary Medicine (joint with Iowa State) and Professional Golf Management. With the exception of a diagnostics course all

other course requirements are currently being taught. Dr. Gary Hein, entomologist from the PHREC, became the director this month. This program is patterned after the University of Florida's Dr. of Plant Medicine but will have more emphasis on extensive Midwest crops. If you know of anyone who would be interested in obtaining the education to engage in private or industry consulting, or state or federal regulatory careers, please contact Dr. Hein [ghein1@unl.edu](mailto:ghein1@unl.edu).

Our department is nearing a sustainable number of graduate students (18-20) with 16 students and a second Fulbright scholar due to join us in mid-2009. To maintain adequate numbers of students taking our graduate courses, allow faculty time for undergraduate teaching, and allow for course diversity, we have instituted graduate course requirements (effective Jan '10) of 864A & 864B Epidemiology/Disease Management & Molecular/Cellular Plant Pathology courses, 2 or 3 seminars, 1 credit of Diagnostics/Field course, and one other course from Nematology, Plant Associated Bacteria and Fungi, Host-Parasite Interactions, or Virology. At the undergraduate level we will be cooperating more with the School of Biological Sciences to teach overload courses such as Introductory Microbiology. I will keep you informed as this area develops.

I am pleased to announce that we have recruited an excellent student to be our first Extension emphasis graduate student. Kevin Korus graduated with a major in horticulture from the UNL Agronomy & Horticulture Department. Thanks to Dean Elbert Dickey we were able to offer Kevin an Extension sponsored assistantship for an MS degree working with Dr. Tamra Jackson on corn nematodes. Kevin will be working with Extension Educators, working in the Diagnostic Clinic, participating in Crop Protection and Management Clinics, and writing extension NebGuides/NebFacts. He

will also become acquainted with our interactive, team oriented Extension Specialists as they plan and execute extension programs. We want to recruit more students to this unique Extension emphasis M.S. or Ph.D. program, so spread the word.

I am also very glad that I do not have any retirements to announce for 2008. The economic climate and teaching/research opportunities have kept all faculty on board.

Finally, I want to ask each of you to consider a donation to the department's Foundation account to fund our plant pathology, agriculture and Nebraska highlights tour for our students and staff. We plan to make this tour an annual event. Please make checks payable to and send them to:

University of Nebraska Foundation  
1010 Lincoln Mall, Suite 300  
Lincoln, NE 68508

Please place the fund name in the memo line: "Plant Pathology, Agriculture, and Nebraska Highlights Tour Fund". Thank you, in advance, for your support!

Jim Steadman  
Professor & Head

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## Welcome ☺

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*Welcome to our new department members:*

**Craig Aldrich** – research technologist in Dr. Tatineni's lab

**Amber Davis** – research assistant in Dr. Mitra's lab

**Timo Greiner** – visiting scientist from Germany in Dr. Van Etten's lab

**Jeff Toavs** – research technologist in Dr. Giesler's lab

**Michael Zwingman** – research technologist in Dr. Wegulo's lab

*Welcome to our new graduate students:*

**Jae Behn**

Advisor: Dr. Tamra Jackson

**Melissa Ebeling**

Advisor: Dr. Roy French

**Kevin Korus**

Advisor: Dr. Tamra Jackson

**Pamela Pena-Perdoma**

Advisors: Dr. Carlos Urrea/Dr. Jim Steadman

*Welcome to our new arrivals:*

Baby girl, Ayden, born to **Serena McCoy**, on June 13, 2008.

Baby boy, Calvin, born to **Kim Miller**, on July 19, 2008.

Baby girl, Reiley, born to **Michael Zwingman**, on January 23, 2009.

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**Farewell ☹**

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Employees and friends who left the Department of Plant Pathology in 2008:

**Dr. Melina Lopez Meyer** – visiting scientist from Mexico in Dr. Steadman's lab

**Seth Watson**, technologist in Dr. Giesler's lab - accepted a position at Syngenta

**Jorge Venegas**, MS student in Dr. Steadman's lab – accepted a position in Ecuador as a Balsa tree breeder

**Dr. Graciela Godoy-Lutz** was in Dr. Steadman's lab for 4 months this past summer

**Carlos Jara** – visiting scientist from Chile in Dr. Steadman's lab

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**Students on the Move**

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

**2008:**

**Zhengqing Fu, Ph.D.** “*Pseudomonas Syringae* Type III Secretion System and Effectors”

Advisor: Dr. Jim Alfano

**Nancy Gonzalez, Ph.D.** “Genetic diversity of *Rhizoctonia solani* causing web blight and sources of resistance in *Phaseolus* spp.”

Advisor: Dr. Jim Steadman

**Jorge Venegas, M.S.** “Identification of rust resistance and a molecular marker in a cross within tertiary gene pool of common bean; and characterization of *Rhizoctonia spp.* isolates from western Nebraska”

Advisors: Dr. Jim Steadman/Dr. Carlos Urrea

Congratulations Zhengqing, Nancy and Jorge!

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**Plant Pathology  
Student Organization**

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

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**T-Shirts for Sale**

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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.

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## Recruitment News

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Lindsey Hanson recruited a student and postdoc from Minnesota and brought them to Lincoln to meet with potential advisors in the department. Thanks, Lindsey, for helping us out with recruitment!

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## Honors and Awards

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Congratulations to **Dr. Loren Giesler, Dr. Stephen Wegulo** and **Amy Ziems** – participants in “Backyard Farmer” - “Backyard Farmer” recently won the Gold Award for Service to Agriculture at the Nebraska Broadcasters Association Awards of Excellence.

**Karl Brauer** – David H. Larrick Travel Award

**Dr. David Dunigan** – promoted to Research Associate Professor

**Jessie Fernandez** – Milton E. Mohr Fellowship for 2008-2009; Widaman Trust Distinguished Graduate Assistant

**Dr. Loren Giesler** – 2008 Education & Research Person of the Year Award from the Nebraska Agri-Business Association

**Jim Gurnon** – IANR Outstanding Managerial/Professional Employee for July/August 2008

**John Nopsa** – Milton E. Mohr Fellowship for 2008-2009; 2008 Goss Memorial Scholarship

**Trung Nguyen** – Milton E. Mohr Scholarship for 2008-2009

**Angel Ramirez-Suarez** – Al Moseman International Studies Award

**Dr. Jim Steadman** – North Central Division of American Phytopathological Society Distinguished Service Award

**Tania Toruno** - Milton E. Mohr Fellowship for 2008-2009; 2008 Goss Memorial Scholarship

**Dr. Stephen Wegulo** – 2008 IANR Dinsdale Family Faculty Award

**Giane M. Yanai** – Shear-Miles Fellowship; 2008 Goss Memorial Scholarship

**Hu Yin** – David H. Larrick Travel Award

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## 2008 UNL Service Awards

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Congratulations to:  
Donn Ladd - 25 years  
Margaret Denning - 10 years  
Christy Jochum - 10 years  
Janelle Millhouse - 10 years

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## BIOS 968 - Plant Pathology Seminar – Spring 2009

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List of seminar speakers and dates:

Jan. 20 – John Nopsa  
Jan. 27 - Haoyu Si  
Feb. 3 - Tania Toruno  
Feb. 10 - Hu Yin  
Feb. 17 - Pamela Pena Perdoma, Jae Behn  
Feb. 24 - Bill Rittenour  
Mar. 3 - Melissa Ebeling, Kevin Korus  
Mar. 10 – Leny Galvez  
Mar. 24 – Angel Ramirez-Suarez  
Mar. 31 – Giane Yanai  
Apr. 7 – Karl Brauer  
Apr. 14 – Jessie Fernandez  
Apr. 22 – Brian Staskawicz  
Apr. 28 – Dr. Bob Harveson

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## **Extension News/ Diagnostic Clinic**

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### **Statistics from the Diagnostic Clinic for 2008:**

#### **Total Samples in 2008 = 1073**

Entomology samples = 49

Horticulture samples = 9

Weed Science samples = 21

Plant Disease samples = 994

#### **Percentage of clients served:**

Agribusiness = 43.6%

Homeowner/Home Gardener = 14.9%

Grower/Farmer = 8.7%

Researcher/Specialist = 7.5%

Crop Consultant = 6.1%

Lawn Care/Landscaper = 3.5%

Left Blank = 6.8%

#### **Percent of samples in category for entire clinic:**

Field Crops (corn, soybean, small grains) =  
59.9%

Woody Ornamentals – Evergreen = 13.2%

Woody Ornamentals – Deciduous = 6.5%

Perennial = 4.4%

Turf = 4.2%

Fruit = 1.5%

Insect ID = 1.6%