

SPOREPRINTS

Department of Plant Pathology & Environmental Microbiology

SEPTEMBER 2014

THE PENNSYLVANIA STATE UNIVERSITY

CONGRATULATIONS



Dr. Fred E. Gildow, PPEM Dept. Head... Retired as of August 31, 2014

As of August 31, 2014, **Dr. Fred E. Gildow**, Professor and Department Head of PPEM, officially retired. Dr. Gildow started his career with Penn State, in the Plant Pathology Department in 1983, as Assistant Professor. In 2009, Dr. Gildow became the Department Head, succeeding Barb Christ. The department will be holding a retirement party for Dr. Gildow on Saturday, October 4th from 5pm – 7pm at the Agronomy Farm – Rock Springs. Hope to see you there!

Dr. David Geiser – Named Interim Department Head

Dr. Geiser has assumed the role of Head of the Department of Plant Pathology and Environmental Microbiology on an interim basis. The outside search for a new Department Head continues (<http://plantpath.psu.edu/about/departments/department-updates/dept-head-position>) and David will return to the rank and file faculty once we have a new Head in Buckhout. David looks forward to working with you all in the coming months, and reminds all PPEM denizens to identify good candidates for the permanent job, and pass their names on to Dr. Gary Moorman, Search Committee Chair!



Dr. Beth Gugino, Associate Professor - earned Tenure and her promotion to Associate Professor of Plant Pathology and Environmental Microbiology as of May, 2014. Congratulations, Beth!



Dr. Paul Backman, Professor – retired on March 31, 2014. Paul was with the department for over 10 years, as a professor of biological control. He and his wife have made their new home in Fairhope, AL.

Congratulations to our Spring and Summer Graduates!

- **Dr. Alamgir Raham** (Ph.D. Plant Pathology; advisor Dr. Wakar Uddin) “Evaluation and characterization of systemic defense responses against *Magnaporthe oryzae* in perennial ryegrass using chemical and biological elicitors of plant defense”. Alam is currently a post-doc with the Pennsylvania Department of Agriculture in Harrisburg, PA.
- **Eric O’Neal** (M.S. Plant Pathology; advisor Dr. Don Davis) “Biological control of *Ailanthus Altissima*: Transmission, Formulation, and Risk Assessment of *Verticillium nonalfalfae*”.
- **Hilary Cheesman** (M.S. Plant Pathology and International Agriculture and Development; advisors Drs. Beth Gugino and Paul Backman) “Plant-associated microbes for the sustainable production of Faba bean (*Vicia faba*) with applications in South America” currently Hilary is an adjunct faculty member at Southern Vermont College in Benninton, VT teaching Medical Microbiology.
- **Dr. Emily Pfeufer** (Ph.D. Plant Pathology; advisor Dr. Beth Gugino) “Sources of inoculum, epidemiology and integrated management of bacterial rots of onion (*Allium cepa*) with a focus on center rot, caused by *Pantoea ananatis* and *Pantoea agglomerans*”. Emily is currently a post-doc with Beth Gugino and actively interviewing.
- **Ilse Huerta** (M.S. Plant Pathology; advisor Dr. Beth Gugino) “Evaluation of oospore production, metalaxyl sensitivity, and forecast-based fungicide applications for the management of *Phytophthora infestans* on tomato in Pennsylvania”. Ilse is currently residing in Mexico with her husband and new baby Maria Antonella.

CONGRATULATIONS CON'T...

- **Sara Atyeo, Anita Behari, Rob Harvey, Maliheh Safari and Chris Smith** – on successfully passing the PPEM Written Candidacy Exam, May 2014
- **Freddy Magdama and Maliheh Safari** – who successfully passed their Oral Candidacy Exams in May and Sept, respectively
- **Dr. Laura Ramos** – successfully defended her Ph.D. dissertation entitled “Molecular genetic study of *Erwinia amylovora*: *rpoN*, *argD* and *pyrC* genes” in Sept, 2014.
- **Dr. Vasileios Bitas** – successfully defended his Ph.D. dissertation entitled “Volatile organic compounds (VOCs) from the soilborne fungi *F. oxysporum* and *V. dahliae* promote plant growth and enhance biotic and abiotic stress resistance in *A. thaliana* and *N. tabacum*” in Sept, 2014.

NOTEWORTHY NEWS...

Chris Smith was awarded First Place in the Graduate Student Oral Presentation Competition at the Annual Meeting of the Mycological Society of America meeting held in June at MSU in East Lansing, Michigan for his presentation titled “Application of the Alternative Host Hypothesis Elucidates Potential Virulence Genes in *Pseudogymnoascus destructans*”. Following the MSA Meeting, Chris also attended an NSF sponsored workshop organized by David Geiser and Andrea Porras-Alfaro (W. Illinois University) on Sequenced-based Identification of Fungi. Chris’s travel and registration was funded in-part by a travel grant from the College of Agricultural Sciences.

Marilyn Roossinck was awarded one of the 2014-15 College of Agricultural Sciences Mini-Teaching Sabbatical Grants. This is the first year for this grant program to support improving the curriculum and educational programming. Marilyn will be using the grant to support travel to study undergraduate Environmental Microbiology programs already in place at three other Universities. This should provide a lot of information about EM program organization and student experiences for use in our Environmental Microbiology workshop to develop a Minor being organized for next fall.

Dr. Seogchan Kang received the Jeanne and Charles Rider Endowment for Support of Research on the Biotechnology of Food Crops from the College of Agricultural Science. Seogchan’s proposal was entitled: “Enhancement of plant growth and stress resistance via manipulation of their genes or pathways that are involved in responding to semio-volatiles from fungi.”

Bastian Minkenberg, PhD. Student advised by Dr. Yinong Yang will be again participating at PlantingScience.org as part of the ASBP (American Soc. of Plant Biologists) sponsored Master Plant Science Team. He will online mentor high school student research teams. He will help students to plan, perform, and evaluate their first plant science related classroom study in cooperation with their teacher.

- Planting Science: <http://www.plantingscience.org/index.php?module=content&func=view&pid=70>
- Master Plant Science Team: <http://plantingscience.org/MPSTInfo.html>

Dr. Yinong Yang’s lab recently published a research paper titled “Direct Phosphorylation and Activation of a Mitogen-Activated Protein Kinase by a Calcium-Dependent Protein Kinase in Rice” in Plant Cell. In addition **Dr. Yinong Yang** presented a talk titled “Targeted Mutation and Precise Genome Editing in Plants with CRISPR/Cas9 System” at the Annual Scientific Meeting of the American Society of Plant Biologists held July 12-16, 2014, in Portland, Oregon.

Drs. Don Davis and Matt Kasson recently had articles published concerning a fungus which may help stop the invasive spread of tree-of-heaven. The fungus, *Verticillium nonalfalfae*, completely eradicated the tree-of-heaven plants after injection within the test area. Another article concerning Ambrosia beetles and the challenges Avocado farmers are facing was published by **Drs. David Geiser and Matt Kasson**. Per Dr. Geiser “This really wasn’t on the radar screen of too many researchers”, but over the past four or five years ambrosia beetles seem to be really out of control”.

Welcome!

The PPEM department welcomed three new graduate students this fall...



Jennie Diehl, M.S. Student
Advised by Dr. Beth Gugino



Laura del Sol Bautista Jalon, Ph.D. Student
Advised by Dr. Maria del Mar Jimenez Gasco



Kaixi Zhao, Ph.D. Student
Advised by Dr. Cristina Rosa

NOTEWORTHY NEWS CONTINUED...



Lori Long, PPEM graduate support assistant left in early June to accept a promotion within the College of Engineering, as the Graduate Programs Coordinator, Office of the Dean. A farewell reception was held for Lori by the Department. Lori's replacement **Kathy Zimmerman** joined in July, as the Graduate Support Assistant. Kathy was previously employed by the College of Engineering – Computer Science Department. The department welcomed Kathy with a morning reception.



Christina Dorsey, started with the department in June, replacing Chardonnai Johnson. Christina is responsible for the Hildebrandt Library, PPEM website maintenance, seminar announcements, mailing Plant Disease Clinic letters and assisting with other projects, on an as needed basis. Christina was previously employed as an Admin Assistant at Nittany Brokerage and as a library paraprofessional at the State College Area School District.



On September 3rd, the **PPEM** department held its annual **Fall Welcome Breakfast** in 208A Buckhout Lab!

Additional Reminders.... Any items that are newsworthy – Department-related (faculty/staff/student) events, awards, publications, trips... please send to Sandy for inclusion on the website and in SPOREPRINTS. Photos from these events are appreciated, whenever possible.

UPCOMING EVENTS...

- October 4 Dr. Fred Gildow's Retirement Party – Agronomy Farm, Rock Springs (4pm – 7pm)
- October 6 Sara Bardsley, PPEM Grad Student – PPATH 590 Seminar – 112 BL – 3:35pm
- October 7 PPEM Faculty Meeting – 208A BL – 9:30am
- October 8 PPEM Staff Meeting – 208A BL – 2:00pm
- October 13 Dr. Chris Lawrence, Virginia Tech, Seminar Speaker – 112 BL – 3:35pm
- October 20 Dr. Lisa Hoffman, DuPont Crop Protection, Seminar Speaker – 112 BL – 3:35pm
- October 27 Dr. Nicole Donofrio, Univ. of Delaware, Seminar Speaker – 112 BL – 3:35pm
- November 3 Yueying Chen, PPEM Grad Student – PPATH 590 Seminar – 112 BL – 3:35pm

Name this Disease and Casual Agent...



If you are interested in competing, send both the common name of this disease and its causal agent to Sandy in an e-mail with "SporePrints Contest" on the subject line. Only contestants who submit entries with both answers correct will be considered winners. Winners will be determined and their names posted on the Mailroom bulletin board one week after SporePrints is distributed. At the Dept. Award Ceremony (winter 2014), the individual with the most wins, will receive recognition and a travel award. **If you need more information on the host talk to Brian Aynardi.**