

Department of Plant Pathology
◆◆ The Pennsylvania State University ◆◆
2006-07 Annual Newsletter

Greetings from Happy Valley



We had many positive comments from the 2005 Annual Newsletter. So we will now give you a glimpse of our events in 2006-07.

2006 has been a year of highs and lows. First we were able to argue for emeritus status for Dr. James Tammen, which was officially celebrated in September. As you will see, the list of awards received within the department was quite high. Other highs were the arrival of Dr. Henry Ngugi to the fruit program located at Biglerville and Dr. Yinong Yang, who has taken our genomics position. We are blessed to have them in the department. Our lows were the losses of Dr. Paul J. Wuest, who died September 5, 2006, after a long illness; and Dr. Alan MacNab, who fought colon cancer courageously and passed away November 28. Dr. Fred Lewis passed away in December 2006 at the age of 93, and we were also saddened to learn of the passing of Peg Blair, whom many of you knew as a long-time member of the office staff. We had another low in other respects, as Dr. Erick De Wolf left the department in early 2007 to take a position at Kansas State University, and three staff members left the department to take advantage of other opportunities. Despite the lows, overall, the department had an excellent year, as you hopefully will see reflected in the events depicted here.

The faculty has been very active in bringing in visitors to the department, whether it be for a few days or for several weeks to months. We have people coming and going, post docs, visiting scientists, and students. Just as I get to know the person, they are leaving! It is a rich environment and I am pleased to be in the middle of it.

Buckhout Lab still stands and houses the Department of Plant Pathology, although Dr. Yang's lab and office are located in the nearby Life Sciences Building. We had a fire on the fourth floor of Buckhout in an electrical panel box but luckily it snuffed itself out. We have had several floods including waterfalls in the grape lab on the third floor. So we have our challenges, but we have discovered one is not free of these challenges even with a new building. We have learned this from our colleagues in Forestry and Food Science, who both moved into new buildings. Our faculty have prioritized other facilities such as our greenhouses as of higher importance than a new building.

The faculty are active in our professional societies, APS, MSA, and others, with Gary Moorman and myself serving on APS Council. Dave Geiser hosted the Mid-Atlantic States Mycology Conference in our department in the Spring of 2006, and now we are preparing for hosting the MSA meeting in 2008 with Dave as the local arrangements chair.

As with all institutions, our department is seeking support for existing endowments as well as developing new ones. We thank all of you who have contributed. The list of endowments with more detail is provided in another section of the newsletter. We are proud to say that in 2007 we kicked off the with the Richard R. Nelson Memorial Lecture series supported by the endowment. You will see the number of scholarships and travel awards awarded this past year, all of which are supported by endowments. The library committee is moving forward with several initiatives supported by the Albert Hildebrandt Library Endowment. These endowments add flexibility to our programs that allow us to do things otherwise not achievable.

Last year, I spoke of new initiatives at the College level. From the Plant Sciences study group, it was recommended that the college hire a faculty member in the area of plant functional genomics. This is where the position for Dr. Yinong Yang sprang from, and our department was the lucky one. We have some new initiatives in progress and with these we hope to have increased visibility in the areas of invasive species, epidemiology, and pest management positions that will hopefully replace the MacNab and De Wolf positions. I hope to be able to report on them next year.

I am proud to say that unlike many other departments, our programs span basic and applied areas to develop teams addressing traditional problems but with renewed modern techniques. One such team is the NSF project on fire blight disease resistance with Dr. Tim McNellis in the lead. I hope to encourage these types of teams among our faculty and emerge with stronger programs as a result.

I said this last year and I will say it again. It is a privilege to be a department head of a department of this size and rank. And it is a delight to come to work each day and support as best I can the excellent programs being conducted by dedicated and top notch faculty, staff, postdocs, and students of this department.

We hope that you enjoy the newsletter and urge you to keep I touch!

With my best wishes,
Barb Christ



Mid-Atlantic States
Mycology Conference, 2006

In Memory

Marian R. "Peg" Blair passed away on June 1, 2007, at the age of 77. Peg was a member of the office staff for more than 20 years. She was hired by Jim Tammen and worked part-time for many years while her children were young. In 1976 Peg became a full-time member of the staff and continued in Plant Pathology until her retirement in 1988. Her true expertise was as a technical typist, and she also provided support for the Extension program and graduate studies. Those of us who worked with Peg remember her quick wit, great sense of humor, and her caring soul. Peg is survived by her husband and two sons.



Fred H. Lewis, Professor Emeritus of Plant Pathology, died December 16, 2006, at the age of 93. Dr. Lewis was born in South Carolina, graduated from Clemson University, and received his Ph.D. in Plant Pathology from Cornell University. He joined the Penn State faculty in 1943 with a full-time assignment to the Fruit Research Center at Arendtsville. The Adams County fruit growers and the Musselman family and Foundation recognized his leadership and foresight on behalf of their industry and worked closely with him to establish a new facility in Biglerville. Dr. Lewis was instrumental in the development of the Biglerville Center and served as local representative in the purchase of farm land and the construction of new buildings to house an expanded staff with modern equipment. In 1963 he was named the first Scientist in-Charge of what is now known as the Fruit Research and Extension Center and retired from that position in 1976. During his career, Dr. Lewis published the results of his research in two book chapters, 175 articles, and in annual pest control schedules for fruit in Pennsylvania and adjacent states. The Adams County fruit growers recognized his outstanding service in 1953, and in 1973 he received the State Horticultural Association of Pennsylvania Outstanding Horticulturist Award. Dr. Lewis is survived by three children, six grandchildren, and four great-grandchildren.



Alan A. MacNab, Professor of Plant Pathology, died November 28, 2006, at home. He had fought a courageous battle with cancer. Alan was born April 12, 1941, in Bear River, Nova Scotia. He was a graduate of Nova Scotia Agricultural College and Macdonald College, McGill University, in Montreal, and received his M.S. and Ph.D. degrees from Cornell University. He joined the Department of Plant Pathology as assistant professor in 1971. During his 35 years of service at Penn State, he was a leader in providing educational and technological support for the vegetable industry in Pennsylvania and the Northeast United States. He was considered one of the leading

authorities on tomato disease forecasting. During his career Alan developed many friendships with growers, county extension agents, and colleagues at Penn State and throughout the Northeast. He was the recipient of numerous awards, including the 1979 CIBA-Geigy Award from the American Phytopathological Society, the 2006 Extension Award from Gamma Sigma Delta, and the 2007 Pennsylvania Vegetable Growers Association Award, which was presented to him just prior to his death. Alan will be remembered for his gentle spirit, dedication to his work, a lifelong connection with his farm roots, and his love for friends and family. He is survived by his wife, Cynthia, two children and one grandchild.



Paul J. Wuest, Professor Emeritus of Plant Pathology, died September 5, 2006, at Hershey Medical Center. Paul was born February 26, 1937. He graduated from Penn State with a B.S. in Horticulture in 1958 and a Ph.D. in Plant Pathology in 1963. After serving as a Captain in the Army through 1964 at the U.S. Army Biological Lab in Fort Detrick, MD, Paul joined the Department of Plant Pathology as assistant professor and extension specialist, with responsibility for all aspects of commercial mushroom cultivation. He retired as professor emeritus in 1999 only because his physical health prevented him from continuing at the commitment level to which he was accustomed. In 2005 he was honored as a

Distinguished Alumnus of the College of Agricultural Sciences and Department of Plant Pathology. Paul dedicated his life to the mushroom community as a mushroom extension specialist and researcher and became renowned for his candor and practical approach to the challenges associated with commercial cultivation. He lost a heroic battle against a disease that might have crippled his body but never conquered his spirit and creative sense of humor. Paul is survived by his wife, Jan, four children, and nine grandchildren



◆◆Spotlight - Felix Lukezic◆◆

Felix Lukezic joined the department in 1965 as assistant professor and retired as Professor Emeritus in December, 2000. While on the faculty he became involved in teaching freshman seminar and "Issues and Ethics in Agriculture" to undergraduates in the College of Ag Sciences. He continues to teach the ethics course and has been named a Provost's Emeritus Faculty Teacher Scholar numerous times. After his retirement Luke also became active as a Habitat for Humanity volunteer—his "other" job.

Greetings to all,

When asked to submit a brief note highlighting my current role as a Professor Emeritus teaching in the College seven years after retiring, it brought back many of my thoughts about being relevant to new students. Comments from two of my recent students taking my course "Issues and Ethics in Agriculture" cleared those thoughts, and I would like to share them with you. They show why I will be in front of the class next year.

"Ag Ethics is a very educational class to take and I have recommended it to all of my friends. I learned so many things and received many different perspectives on controversial topics. Even though I may not have agreed with everyone, which most of the time I did not, it was still important for me to see and maybe better understand others' opinions. Thanks for a great class!"

"Dr. Beierlein and Dr. Lukezic, I want to thank you both for the opportunity to take this class. It has honestly been my favorite class in my college career thus far. I have taken more away from this class than any other, and it has opened my mind to perspectives that I would not otherwise have been introduced to. It has changed my way of thinking, and analyzing the other side of some very controversial issues. Luke, in addition to that I would like to thank you for playing devil's advocate, whether or not you actually saw things differently than the entire class. You opened my eyes and pulled me away from my backwoods, country boy way of seeing things. Even if I do not share a position with you on all topics (or many at all) you did a great job of teaching me to respect other's opinions, and hear them out. And hey guys, I'm not trying to kiss ass here. The class was great, and I had a good time."



Felix Lukezic on the job in his second career as an electrician for Habitat for Humanity

The above comments were clearly not edited, but from the heart and honest.

I recently suffered one of the shocking milestones of my life was when I attended the retirement celebration of my first Ph.D. graduate student, Dr. **Robert B. Carroll (Ph.D. '71)**. Dr. Carroll recently retired from the Department of Plant and Soil Science, University of Delaware.

When not teaching, my other job is as one of the electricians for Habitat for Humanity. I have completed most of the wiring in several of the last houses we have built. It is a real pleasure to work with the families and see the light in their eyes when they get the keys to their own home. In short, retirement isn't easy. There's still a lot of work to be done.



Professor Lukezic and his first Ph.D. student, Dr. Robert B. Carroll, a 1971 Ph.D. graduate of the Department of Plant Pathology

Best Wishes,
Felix Lukezic
Professor Emeritus of Plant Pathology

Herbert Cole, Jr. – 2006 Outstanding Alumnus

Congratulations to **Herb Cole (Ph.D. '57)**, who was named a 2006 Outstanding Alumnus of the College of Agricultural Sciences and Department of Plant Pathology. Herb received his B.S. in agronomy (1954), M.S. in botany and biochemistry (1955), and Ph.D. in Plant Pathology (1957) from Penn State. He joined the faculty as assistant professor of plant pathology and specialist for Penn State Cooperative Extension, and retired as professor emeritus in 2005. (*Photo, left, with*



Dean Steele) Herb was recognized for his service to the agricultural industries of Pennsylvania, his contributions to the welfare of the Penn State faculty, and for his contributions to the teaching, research, and extension missions of the university. Herb's service to Penn State has included leadership roles as Head of the Department of Plant Pathology, Chair of the University Faculty Senate, and Assistant to the Director of Cooperative Extension. His record of public service has included an appointment by the Governor to chair the Pennsylvania Pesticide

Advisory Board, membership on major pesticide assessment committees and programs of USDA, and membership on the Department of Environmental Resources Ag Advising Board. Herb clearly has distinguished himself as a well-rounded academician, and the department was delighted to honor him as an Outstanding Alumnus. Special events to celebrate his achievement included a formal College ceremony on November 3, 2006, a coffee and reception hosted by the departments of Plant Pathology and Crop and Soil Sciences, and an informal lunch and roundtable discussion with graduate students and post-docs that Herb especially enjoyed. And although Herb is technically retired, he continues to frequent his Buckhout Lab office and still is ready with the listening ear that we all value so much.

◆◆◆*Undergraduate Education*◆◆◆

AgroEcology Major

Administrative responsibility for the undergraduate Agroecology Major was transferred from Entomology to Plant Pathology in 2006, and Dr. **Paul Backman** serves as Coordinator. Agroecology majors take a range of courses in several areas, including Entomology, Crop and Soil Sciences, Ag Economics and Rural Sociology, Plant Pathology, and Horticulture. Plant Pathology contributions to the major include PPATH 405 (Microbes and Plants), taught by Fred Gildow; AGECO 490 (Senior Seminar), taught by Paul Backman; Tim McNellis's course, AGECO 121 (It Isn't Easy Being Green); and team-led AGECO/ENT 457 (IPM) in which Paul Backman teaches. Scott Isard also offers an AGECO course titled "Atmosphere and the Environment." Sixteen students are currently enrolled in the major.

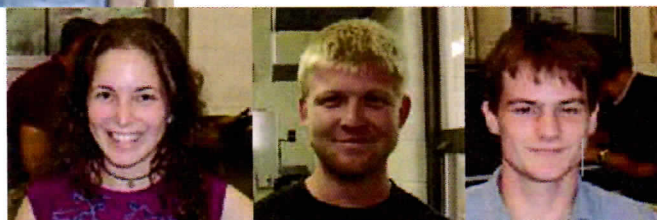
Minor in Plant Pathology

Eighteen undergraduate students have participated in the Minor in Plant Pathology program since it was initiated five years ago. Effective use of biological controls and sustainable agricultural practices requires increased knowledge about plant pathogens and the environmental parameters influencing disease severity. The Plant Pathology Minor focuses on these areas and gives students the background necessary to utilize environmentally sound disease control strategies. The individualized program can be designed to supplement majors in any field of the biological sciences. Following graduation, students in the PPath Minor are often employed by research labs or horticultural businesses based on the students' plant pathology training. The program



coordinator and advisor is Dr. **Fred Gildow**. Current students in the program include Kelly Cooper, Charles Mason, and Melissa Muzurkewicz. *(left)*

Graduates from the PPath Minor program for 2006-2007 included: Rachel Itle, Hans Tornquist, and Paul Readly. *(right)*



◆◆◆Faculty News◆◆◆

Barbara J. Christ is serving her second year as Department Head and her last year on APS Council as Senior Councilor-at-large. She is the newly elected Vice President of APS. Barb's potato project continues to perform potato variety trials and co-release new potato varieties with the aid of **Mike Peck** as the variety specialist. Mike has increased his leadership role on the field aspects of the potato program supported in part by the Pennsylvania potato growers. The potato variety project is highly collaborative, notably with USDA, University of Maine, and Cornell University potato breeding programs. The variety "Marcy" was formally co-released between Cornell and PSU. Other areas of focus for the potato project are developing germplasm with high levels of resistance to early and late blight, common and powdery scab, and Fusarium dry rot. The disease resistance projects are collaborative with Dr. **Kathy Haynes**, Adjunct Professor from USDA, Beltsville, with funding through USDA-ARS and USDA-CSREES grants. The third focus is on understanding powdery scab of potatoes with funding from a USDA-ARS grant.



Dr. **Xinchun Qu** (*left*) continues in his postdoctoral position and contributed three publications on powdery scab. **Sara May** continues to split her time between the potato program and a few hours per week in the Plant Disease Clinic. She provides leadership on the potato field project and on writing Fungicide-Nematicide reports and compiling an annual report to the potato

industry that includes all of the variety data and all applied field results. **Damitha**

Wickramasinghe continued on the potato program and conducted research on molecular markers associated with late blight resistance. She finished her M.S. thesis this spring and received her diploma at Summer 2007 Commencement.



Jose Santa Cruz Hildalgo (*right*), an M.S. student, is focusing on early blight resistance but also spends half of his time working in the college's

international office. **Nadav Nitzan** conducted research on the epidemiology of powdery scab and black dot disease. He assisted in supervising **Billie Lucas** in an undergraduate student research project research. Their paper on black dot and host range was published in the *American Journal of Potato Research*. **Chad Moore** was promoted to a staff position and continues to assist Mike Peck in providing field support for the potato program. A much-needed new potato harvester was purchased this past year with funds generously provided by the James Watts Potato Research Endowment.



Don Davis teaches a popular undergraduate course (Diseases of Forest and Shade Trees) each Spring semester, as well as a graduate course (Plant Disease Diagnosis) with **John Peplinski** in the summer-session. Don continues to study the effects of air pollutants such as ozone and mercury on forests, in collaboration with Dr. **Dennis Decoteau**. However, his lab is now emphasizing forest and forest products mycology. Current projects deal with the effects of spent mushroom compost on artillery fungi (*Sphaerobolus* spp.), biocontrol of tree-of-heaven (*Ailanthus altissima*) using *Verticillium* spp., and other forest pathology research. Projects are being conducted in collaboration with Drs. Larry Kuhns and Mike Fidanza, Department of Horticulture at Penn State, as well as the USDA Forest Service and the Pennsylvania Bureau of Forestry. Most of Don's research is supported by grants from the

Commonwealth of Pennsylvania and the USDA Forest Service. He currently mentors **Mark Schall**, Ph.D. candidate. Don also serves on various state and federal committees and panels.

Erick De Wolf, field crops extension specialist, resigned his faculty position in March 2007 and joined the faculty at Kansas State University. **Mizuho Nita**, post-doc in Erick's program, joined him in Kansas. Best wishes to both of them!



Katelyn Tilley (Ph.D. candidate), Mizuho Nita, Justin Dillon, Erick De Wolf, and Nick Dufault (Ph.D. candidate)



Maria del Mar Jimenez Gasco started the year by teaching PPATH 505 "Fundamentals of Phytopathology." A new course, PPATH 120, "The Fungal Jungle," designed in collaboration with Dr. **Gretchen Kuldau** has been approved as a General Education course for the Fall of 2007. Maria del Mar is currently involved in research studying the population biology of several fungal pathogens. Dr. **Viji Gnana** (*right*), post-doctoral scholar, worked in the program until May of 2007, when she relocated to Georgia with her family. Viji was analyzing the population structure of the fungus causing apple scab using microsatellite markers. This project was funded by the PA Department of Agriculture and is the result of a collaboration with Dr. **J. Travis Ponusa Songtipya**, a Ph.D. candidate (Intercollege Graduate Program in Materials), is studying antimicrobial properties of nanocomposites for agricultural and food packaging applications. An undergraduate student, **Nyra Khetarpal**, worked with Ponusa on the changes of fungal dynamics when we use different surfactants in the polymers. Dr. **Carla Garzon** (**Ph.D. '04**) (*right*) worked as a postdoc with us for eight months before moving to Ohio State University. **Jeniffer Yanez** (**M.Agr. '05**) (*left*) is working on several aspects regarding *Fusarium* wilt of chickpeas. **Katie Cummings**, a PSU undergraduate biology major, joined the lab working on *Venturia inaequalis*. Maria del Mar is also collaborating with Dr. Kelli Hoover (Entomology), Ming Tien (Biochemistry and Molecular Biology), and John Carlson (Forest Resources) studying the microbial community involved in lignocellulose digestion present in the gut of the Asian longhorned beetle. Thanks to this group's initiative, the Department of Energy's Joint Genome Institute will be sequencing the beetle's gut metagenome. We also had a visitor in the lab this year, **Monica Berbegal-Martinez**, a graduate student at the Polytechnic University of Valencia, Spain, who spent a three-month research visit funded by the Ministry of Education and Science, Spain. Monica focused on the development of microsatellite markers for population studies of *Verticillium dahliae* and studied the population structure of *Fusarium circinatum* in Northern Spain. Finally, Maria del Mar spent June and part of July in Cordoba, Spain, as a visiting professor, an award given by the University of Cordoba. She maintains a very active collaboration with the Institute of Sustainable Agriculture in Cordoba. It was good to be back home!





David Geiser has two new students (Ph.D. student **Dylan Short** and M.S. student **Padmini Herath**) and a new post-doc (**Sarah Melissa Witiak**) (*below*). Dylan's project will be on the population dynamics and species recognition of clinically important *Fusaria* that are common in the environment. Padmini will be working on databases that improve the utility of the culture collection. Sarah Melissa's project brings *Aspergillus* back in the lab – and not as a contaminant! She is utilizing the available complete genome sequences to identify new markers for a “many locus” phylogeny of the genus. Postdoc **Jaime Blair** left the lab in summer, 2006, for a special fellowship at Amherst College, but produced a wonderful multilocus phylogeny of the genus *Phytophthora* in her short time here. **Nik Zitomer** graduated in November and started a postdoc with Charles Bacon. Postdoc **Michele Mansfield (Ph.D. '05)** is now working on the *Phytophthora* database project, although we do still occasionally drag her into some *Fusarium* work. David co-instructed the Fusarium Laboratory Workshop in Bari, Italy, in June, 2006, and brought his wife, Sarah, and then 7-month old son Dash along for the trip. He highly recommends bringing a baby along for a trip to Italy as it makes you an instant celebrity. He also gave invited seminars at the University of Arizona and Purdue, and again co-instructed the Fusarium Laboratory Workshop at Kansas State in June. David received the honor of induction as a Fellow of the American Association for the Advancement of Science in February. If the random piles of books and papers in his office are any indication, he has a lot of manuscripts to get out.



Fred Gildow taught PPATH 405, “Microbe-Plant Interactions in Plant Disease and Biological Control,” for the twentieth time in 2006. He claims to be getting the hang of it now. Fred continues to coordinate the undergraduate Minor in Plant Pathology Program and is advising six students. Current collaborative research projects with colleagues at Cornell, USDA at Ft. Detrick, and Penn State focus on three areas: Electron microscope studies of virus pathways through aphid vectors, vector studies of plum pox virus transmission by aphids, and field studies of viruses infecting legume crops. **Bill Sackett** continues to provide excellent technical support, maintaining over 20 genetic clones of aphid vectors and eight virus strains used in support of research programs at three research institutions. Bill also is instrumental in carrying out various transmission experiments and assisting in teaching PPATH 405. Post doc **Xiaolong Yang** left Fred's lab in 2006, but continues to collaborate on research through his new position at the USDA Mass Spectrometry Facility at Cornell University. This past year undergraduates **Paul Readly** (Horticulture) and **Vince Agresto** (Biology) completed independent research projects on virus-vector studies and following graduation moved into research positions in the horticultural and pharmaceutical industries. On the personal side, Fred's oldest son, Doug, has started Ph.D. studies at U.C. Berkeley this summer, Nick is teaching mathematics at State College High, and his baby daughter, Marie, is now a sophomore in environmental engineering at PSU. Weekends find Fred and Viqui exploring Pennsylvania with bikes and kayaks in tow. Contributions to the F. E. Gildow Miata fund can be sent to this address.



John Halbrendt continues to divide his time between research on nematode management and surveillance of Plum Pox Virus (PPV). Nematode management projects funded by the Pennsylvania State Horticultural Society and Pennsylvania Department of Agriculture (PDA) include the use of nematode suppressive cover crops and green manure treatments as well as techniques to prevent nematode virus transmission using foam mulch. Collaborators on this work include Drs Inga Zasada (USDA/ARS) and James LaMondia (Connecticut Agricultural Research Station). Projects designed to search for reservoirs of PPV in native plants and ornamentals within the quarantine zone are funded by USDA/APHIS and PDA. This has been a busy travel year for John, which included attending the WCC-20 annual meeting in Victoria, Canada, the Society of Nematologists meeting in Hawaii, The 2nd International Symposium on Biofumigation in Moscow, Idaho, the APS meeting in Quebec, Canada, the NE-1019 annual meeting in Gainesville, Florida, and participating in the 4th Shandong Experts Conference in Jinan, China. When not in the office or lab John can usually be found tending his vineyard.



Scott Isard was part of a team of researchers working on soybean rust that received the USDA Group Honor Award for Excellence this past year for their "outstanding contributions to agriculture, to the consumers of agricultural products and to the ability of the Department to serve America." Dr. Isard's contribution was highlighted in the USDA nationally distributed documentary titled "The Rust Invasion." In April 2006, the USDA Economic Research Service reported that many millions of U.S. soybean acres that would have received at least one fungicide application remained untreated for soybean rust in 2005 due to information disseminated through the USDA Soybean Rust Information System website developed by the PSU-led team. In that year alone, this information increased U.S. producers' profits between \$11 to \$299 million (\$0.16 to \$4.12 per acre) at a low cost of between \$2.6 and \$5 million. This year, Scott has guided the transition of the USDA Soybean Rust Information System to the Pest Information Platform for Extension and Education (PIPE), a state-of-the-art Information Technology IPM tool that he developed in collaboration with Drs. Joe Russo, (ZedX Inc., an Information Technology company in Bellefonte, PA) and Dr. **Erick De Wolf**. Recently the PIPE was "institutionalized" with the USDA creating a multi-agency steering committee. In 2007, the USDA Risk Management Agency will provide \$3.1 million to fund PIPE activities.



Dr. Gretchen Kuldau's program is focused on head scab of wheat and *Fusarium* mycotoxins. Ms. **Katelyn Tilley Willyard**, Ph.D. candidate, conducted the head scab research in collaboration with Dr. **Erick De Wolf**. This project is funded by the USDA's U.S. Wheat and Barley Scab Initiative. **Nik Zitomer** defended his Ph.D. thesis titled *Mycotoxicology to Accompany Phylogenetic Revisions to the Genus Fusarium*. This work was funded by the USDA NRI Food Safety panel and was done in collaboration with Drs. **David Geiser**, Doug Archibald (Crop and Soil Sciences), Dan Jones (Michigan State), Kerry O'Donnell (USDA), Eric Synder (Chemistry), and Todd Ward (USDA). Nik has now joined the USDA Toxicology and Mycotoxin Research Unit in Athens, Georgia. In the fall, Mr. **Li Guo** joined the group as a Ph.D. student; he will be investigating endophytic growth of *Fusarium verticillioides* in maize. During the first half of the year we had the pleasure of hosting Dr. **Eunice Mutitu** a Fulbright Senior Scholar and Professor at the University of Nairobi in Kenya. She spent five months working on phylogenetics with David Geiser and

mycotoxin analysis of maize *Fusarium* from Africa. Dr. Kuldau taught PPATH 596, "Agricultural Biosecurity," in the spring and spent time in the fall creating lessons for an online offering of this course for the Penn State World Campus. In other agricultural biosecurity-related activities, Dr. Kuldau participated in an APHIS-sponsored workshop in April to assist in prioritization of plant pathogens for development of National Plant Disease Recovery Plans that are mandated by Homeland Security Presidential Directive 9. Dr. Kuldau is serving on the steering committee for the Penn State Center for Chemical Ecology, and she was one of the speakers at a fall retreat held by the group. In August Dr. Kuldau attended the joint APS/MSA/CPS meeting in Quebec City where she received the Outstanding Volunteer of the Year Award.



Gary Moorman hired **Seong Hee Lee** in July 2006 as a postdoc to do research on using molecular methods to characterize populations of *Pythium* within species. Lee earned his Ph. D. from North Dakota State, where he worked extensively with simple sequence repeats (SSRS or microsatellites) of fungi, wheat, and barley. He has developed SSR and AFLP markers for *Pythium aphanidermatum*, *P. irregulare*, and *P. cryptoirregulare* to trace isolates to their source in greenhouses. In support of his Extension, Gary updated his 160+ fact sheets, added color photos, converted them to pdfs, and posted them on the Department website with the able assistance of the Department Librarian, **Marsha Tate**. Gary is teaching PPATH 300, Horticultural Crop Diseases, again during Fall 2007. He was elected APS Councilor-at-Large in 2006. Fran, Nathan, and Gary took a long-dreamed of vacation to Hawaii and Kauai in June of '06.

Pete Romaine was awarded a multi-million dollar competitive federal grant to explore the use of the cultivated mushroom as a platform for the high-volume, low-cost production of human biopharmaceuticals. Working on the project along with Pete are his research associate, **Carl Schlagnhauser**, and laboratory assistants, **Rosemary Lanzara**, **Tamara Roth**, and **Amanda Lynn Petro**.



Dan Royse conducts research on edible mushrooms. Dan is co-advising (with **Maria Jimenez Gasco**) **Alma Rodriguez Estrada**, a Ph.D. candidate working on the king oyster mushroom. Another student, **Delphina Mamiro** (*right*) finished her Ph.D. in December 2006 working on production of the button mushroom on non-composted substrate. Currently, she is an Agriculture Research Officer I at the Ministry of Agriculture and Food Security, Morogoro, Tanzania. **Jose E. Sanchez**, visiting professor from ECOSUR, Tapachula, Mexico, spent a sabbatical leave in Dan's lab and conducted research on non-composted substrate for the button mushroom. Dan chaired the 2007 Annual Mushroom Industry Conference and currently serves as president of the World Society for Mushroom Biology and Mushroom Products based in Shanghai, China.



James W. Travis completed 25 years of service at Penn State in the Department of Plant Pathology in 2006. He joined the department in 1981 and was located at University Park campus for the first 20 years of his service. In 2001, he transferred to the Fruit Research and Extension Center (FREC) in Biglerville, PA to better address the needs of the fruit industry during the Plum Pox Virus crisis. In December 2006, he was appointed as the Director of FREC. Over the last

three years, Dr. Travis has led an effort to certify the first organic apple orchard developed by a university in the eastern United States. The orchard was certified organic in 2006 by the PA Certified Organic organization, and the fruit sold to Knouse Foods, a local grower-owned cooperative, and as fresh fruit to a Philadelphia market. Economic analysis of the organic production inputs and fruit value verifies that organic apples can be very profitable to grow in PA. These certified organic apples are the first certified organic products produced by Penn State in a cooperative project between the PA apple industry and a multidisciplinary team of Penn State research and extension personnel. **Anissa Demers Poleatewich** is a Ph.D. graduate student in the department of plant pathology who is working with Dr. Travis to identify and evaluate naturally occurring biological control organisms for the major apple disease organisms occurring in PA orchards. Dr. Travis received an award from the non-profit PA Certified Organic organization for “Outstanding Research and Education in Organic Production” in December 2006.



Wakar Uddin continues to maintain his turfgrass outreach program, providing diagnoses of turfgrass disease problems and management recommendations to turfgrass industry clientele in Pennsylvania. Wakar teaches three courses in turfgrass disease diagnosis and management, including an online course at Penn State World Campus. **Jeff Kern** is an M.S. candidate in the turfgrass disease research program, and **Jeniffer Yanez** and **Jesse Benelli** assist in laboratory and field research. The turfgrass disease research program maintains two laboratories, 58,000 sq ft turf research plots, and three outdoor humidity/mist chambers (1500 ft² each) at the Joseph Valentine Turfgrass Research Center and the Landscape Management Research Center. The turfgrass disease program is part of the Center for Turfgrass Science and the World Campus Distance Education Program at Penn State.



Yinong Yang is a new faculty member, joining the Department in July, 2006. His research program focuses on signal transduction and functional genomics of plant disease resistance and abiotic stress tolerance. He has been working with two Ph.D. students (**Jianping Chen** and **Wenhua Liu**), one postdoctoral associate (**Jai S. Rohila**), and a research technologist (**Qin Wang**) (right) since his arrival. He also directs the dissertation research of



Tameka Bailey, who remains at the University of Arkansas and will graduate in 2007. Dr. Yang’s research is supported by four research grants from NSF/Plant Genome Program, USDA/NRI and USAID/International Rice Research Institute. As a team leader, he collaborates with the researchers at the The Ohio State University (Guoliang Wang), the University of California at Davis (Pamela Ronald), Colorado State University (Jan Leach), and other institutions on a multi-state USDA/NRI coordinated agricultural project in rice genomics. He also collaborates with Ralph Dean (North Carolina State University) and Daniel Ebbole (Texas A & M University) to study protein-protein interactions at the host-pathogen interface. Together with other faculty members, Dr. Yang is teaching Plant Genomics, Plant Stress Biology, Integrative Plant Communication and Growth, and Plant Pathology Colloquium in 2007.



◆◆◆Departmental Social Activities◆◆◆



(left) Mardi Gras Pot Luck Luncheon
28 February 2006.



(right & below)
Plant Pathology Summer Tour and Picnic
at Rock Springs, 21 July 2006.



(below) Plant Pathology Spring Potluck Luncheon, 27 March 2007



◆◆◆Visiting Scholars◆◆◆

Our department was very pleased to host many international scientists who visited the department to collaborate on research projects with our faculty.

Dr. Madhumita Barooah	Assan Agricultural University, Assam, India	October- November 2006	Borlaug Scholar, rice blast disease, with S. Kang
Monica Berbegal-Martinez	Polytechnic University, Valencia, Spain	October- December 2006	Ph.D. research with M. Jimenez Gasco
Dr. Regula Gehrig Bichsel	Federal Office of Meteorology and Climatology, Switzerland	September- December 2006	Aerobiology research and forecasting systems, with Scott Isard
Dr. Sangwoo Lee	Gyeonggido Agricultural Research and Extension Services, South Korea	September 2006- August 2008	Control of <i>Fusarium</i> wilt by biocontrol bacteria, molecular identification of pathogen isolates, with S. Kang
Dr. Eunice Mutito	Professor, University of Nairobi, Kenya	January- May 2006	Senior Fulbright Scholar, mycotoxin analysis of maize <i>Fusarium</i> , and phylogenetics, with G. Kuldau and D. Geiser
Bongsoo Park	Fungal Bioinformatics Laboratory, Seoul National University, South Korea	May 2006- April 2008	Computer programming, data archiving/analysis, and web interface, with S. Kang
Dr. Jose Sanchez-Vazquez	Department of Environmental Biotechnology, ECOSUR, Tapachula, Mexico	August 2006- August 2007	Physiological research on mushroom substrates, with D. Royse
Dr. Meichun Xiang	Key Laboratory of Systematic Mycology and Lichenology, Institute of Microbiology, Chinese Academy of Sciences, Beijing	April- September 2007	Identification of genes important for controlling plant parasitic nematodes by two fungal species, with S. Kang



◆◆2006 Service Awards◆◆

Service Award honorees in 2006 were Erick De Wolf (5 years), Henry Shawley (10 years), Jim Travis and Nancy Wenner (25 years), John Peplinski (30 years); Don Davis and Alan MacNab (35 years).



Awards Ceremony, January 26, 2007

l-r front row--Hye-seon Kim, Alma Rodriguez, Jim Travis, Charles Mason
l-r back row--Erick De Wolf, Donald Davis, John Peplinski, Mark Schall

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◆◆2006-07 Faculty Awards and Honors◆◆

John Ayers – 2006 Member of the Year, Pennsylvania Agronomic Education Conference

Erick D. De Wolf – Early Career Award, Northeastern Division, APS

David M. Geiser – Fellow, American Association for the Advancement of Science

Frederick E. Gildow - 2007 Teaching Award – Gamma Sigma Delta

Scott A. Isard & Team – 2006 USDA Secretary's Honor Award

Gretchen Kuldau – Outstanding Volunteer Award, American Phytopathological Society

Alan A. MacNab – 2006 Extension Award – Gamma Sigma Delta

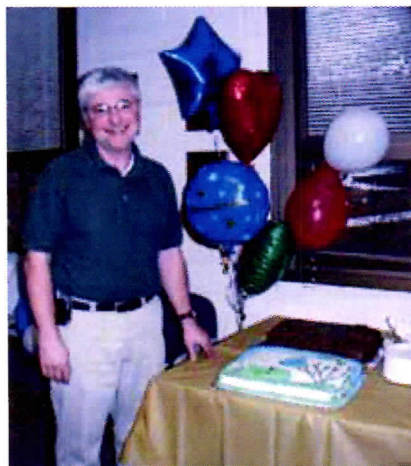
Alan A. MacNab – 2007 Pennsylvania Vegetable Growers Award

Gary W. Moorman - 2007 Extension Award – Gamma Sigma Delta

C. Peter Romaine – Named to Swayne Chair in Spawn Science

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◆◆◆Staff News◆◆◆



The department bid farewell to several staff members over the past year and a half. **Mike Soika**, Research Support Technologist in the turf program, resigned in March 2006 after 20 years of service to Penn State and the Department of Plant Pathology. Mike and his family relocated to North Carolina, where Mike accepted a similar position in the Department of Plant Pathology at North Carolina State University, where **Jim Moyer (Ph.D. '75)** is head.

Jo Rytter (M.S. '87) (pic at right on left) retired from her staff position in Jim Travis' fruit research and extension program. Jo has also relocated to North Carolina (do we detect a trend here?). **Tom Rhodes**, Manager of the Mushroom Test-Demonstration Facility and Mushroom Research Center, retired from Penn State in March 2007 after 35 years of service to the department, college, and mushroom program. **John Pecchia (Ph.D. 2000)**, who had previously been working in David Beyer's program, was named the new Manager effective May 15, 2007. Other staff members at the mushroom facilities include **Henry Shawley**, who marked 10 years of service in 2006, **Douglas Keith**, and **Joseph Martain**. **Vija Wilkinson**, who maintains the Mushroom Spawn Lab, and **Kim Paley** both serve as research support technologists in David Beyer's program.



Bill Sackett continues to provide support for Fred Gildow's research program and assists Fred with PPATH 405 labs, as well. **Jean Juba**, research support technologist in David Geiser's lab, coordinated the Spore Camp that was held in conjunction the Symposium of the Pan-American Association of Aerobiology in June of 2007. **Camille Francl (right)**



and **Annalisa Ariati (left)**, both of Scott Isard's program, assisted with the Aerobiology symposium. **John Peplinski (M.S. '72)** completed 30 years of service to the department in 2006. He and **Sara May (M.Agr. '03)** are actively involved in the North East Plant Diagnostic Network, and Sara serves on the NPDN Diagnostics Subcommittee. Both attended



the National Plant Diagnostics Network national meeting in Orlando in January 2007. Sara, **Mike Peck**, and **Chad Moore** provide staff support to Barb Christ's potato research program. **Randy Dreibelbis**, coordinator of the Plant Pathology Farm, recently was elected as the Plant Pathology representative to the Staff Advisory Committee to the Dean. **Roxanne Lease** continues to coordinate the Research Tours for Ag Progress Days in addition to her role as manager of the campus greenhouse. **Ham Foster** (pictured at grill, next page), long-time member of the farm crew, retired in 2007.



Rita Smith (*left*), receptionist and extension staff assistant, continued to be active as a member of the Social Committee, which hosted events such as the Election Day Spud Lunch and the spring Ice Cream Social. Our librarian and webmaster, **Marsha Tate** (*right*), received her Ph.D. in Mass



Communications in Spring 2007 (congratulations, Marsha!). **Jennifer Coslo**, who was with the department for a year as our staff assistant for graduate programs, left in August 2006 for a



promotion; her position was filled briefly by Michelle Kellander, and in September 2007 we were pleased to welcome **Dianne Taylor** (*left*) as our new staff assistant. She is assisting with both the Plant Pathology graduate program and the AGECO undergraduate major. **Jodi Reed** and her husband, Willis, welcomed their first baby, Jozie Rae, in September. **Becky Peplinski**

focused largely on budgets and accounting during Jodi's leave of absence and served on the department Awards and Alumni Relations Committee. **Teresa Shirk** had another busy year managing Buckhout Lab, rising to the challenges of floods, leaks, a fire, and now renovations to the fire alarm system and the heating/cooling system on the fourth floor. With her help we always make it through.

(*below*) Scenes from Plant Pathology's 2006 Ag Progress Days Children's Display "Fungi Friends & Foes."





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◆◆◆Post-Doc and Graduate Student News◆◆◆

2006-07 Scholarship Awards

Anissa Demers and Hye-Seon Kim—Henry W. Popp Award

Delphina Mamiro—James P. Roberts Scholarship

Mark Schall—Lester P. Nichols Memorial Award

Alma Rodriguez—Arthur Gaspari Memorial Scholarship

Charles Mason and Kelly Anne Cooper (undergraduates)—Harold J. Miller Memorial Award

Hye-Seon Kim received departmental Graduate Student Travel Assistance Awards in 2006 and 2007 to study the pathogenicity mechanism of fungi using a confocal microscope at the Delaware Biotechnology Institute. Hye-Seon also received a travel award from the College of Agricultural Sciences to attend the 24th Fungal Genetic Conference in Asilomar, California, in March.

John-Philippe Marelli attended the joint meeting of the French Phytopathological Society and French Mycological Society held in Aussois, France, in January.



Rachel Melnick traveled to Pichilingue, Ecuador, in March to collect bacterial endophytes from cacao trees. Her travel was supported by a departmental Graduate Student Travel Assistance Award and a Tag-Along Grant from the College of Agricultural Sciences. Rachel presented a poster at the Cacao Producers Alliance (COPAL) meeting and gave a talk at the meeting of International Permanent Working Group for Cocoa Pests and Diseases (INCOPEP) in San Jose, Costa Rica, in October. Rachel also received a departmental Graduate Student Travel Assistance Award to work at the USDA Sustainable and Perennial Crop Lab this summer.

Alma Rodriguez Estrada received a departmental Graduate Student Travel Assistance Award for travel to the French National Institute for Agriculture Research (INRA) in Villenave D'Ornon, France, to study the genetic diversity of cultivated *Pleurotus* spp.

Mark Schall attended the Northeast/Southwide Forest Disease Workshop in June 2006 in Davis, West Virginia. At this meeting, Mark received an award for "Outstanding Student Presentation."

Maria C. Velez Climent received a departmental Graduate Student Travel Assistance Award to conduct research on soybean rust at the USDA-ARS Foreign Disease-Weed Science Research Unit, Fort Detrick, MD.

Damitha Wickramasinghe won third place in the Health and Life Science Category at the 2007 Graduate School Exhibition.





Katelyn Tilley Willyerd won second place in the Health and Life Science Category at the 2007 Graduate School Exhibition.

Welcome New Students 2006-07

Vasilious Bitas – Ph.D. Candidate in Plant Pathology – S. Kang, advisor
Jianping Chen – Ph.D. Candidate in Cell and Developmental Biology – Y. Yang, advisor
Guo Li – Ph.D. Candidate in Plant Pathology – G. Kuldau, advisor
Wenhua Liu – Ph.D. Candidate in Plant Biology – Y. Yang, advisor
Dylan Short – Ph.D. Candidate in Plant Pathology – D. Geiser, advisor



◆◆◆Congratulations to Our 2006-2007 Graduates◆◆◆

Lee Kline – M.S. – Plant Pathology (D. Davis, advisor) – Summer 2006
“Susceptibility and Foliar Response of Broadleaved Species Exposed to Ozone”

Jianxin Liu – Ph.D. – Integrative Biosciences, EMPP (T. McNellis, advisor) – Spring 2007
“Analysis of the Role of Arabidopsis BONZAI 1/COPINE 1 in Defense Response”

Bangya Ma – Ph.D. – Plant Pathology (W. Uddin, advisor) - Summer 2006
“Azoxystrobin Sensitivity and Resistance Management Strategies of *Magnaporthe grisea* Causing Gray Leaf Spot on Perennial Ryegrass (*Lolium Perenne*) Turf”

Delphina Mamiro – Ph.D. – Plant Pathology (D. Royse, advisor) - Fall 2006
“Non-composted and Spent Mushroom Substrates for Production of *Agaricus bisporus*”

Rachel Melnick – M.S. – Plant Pathology (P. Backman, advisor) – Spring 2006
“*Bacillus* spp. from Vegetable Crops as Biological Control Agents against Black Pod Rot of *Theobroma cacao*”

Julio Molineros – Ph.D. – Plant Pathology (S. Isard, advisor) – Spring 2007
“Understanding the Challenges of Fusarium Head Blight Forecasting”

Upeksha Nanayakkara – Ph.D. – Plant Pathology (W. Uddin, advisor) – Spring 2006
“Effects of Silicon on Gray Leaf Spot Development of Perennial Ryegrass Turf”

Nicholas Zitomer - Ph.D. - (D. Geiser & G. Kuldau, advisors) – Fall 2006
“Mycotoxicology to Accompany Phylogenetic Revisions to the Genus *Fusarium*”



◆◆◆*Post-Docs*◆◆◆

<i>Name</i>	<i>Degree</i>	<i>Dates</i>	<i>Program</i>
Philip Jensen	Ph.D., Michigan State University	January 2004-present	T. McNellis
Michele Mansfield	Ph.D., Penn State	January 2007-present	S. Kang and D. Geiser
Ekaterina Nikolaeva	Ph.D., Moscow State University, Russia	June 2004-present	S. Kang
Sook-Young Park	Ph.D., Seoul National University, Korea	June 2003-present	S. Kang
Xinshun Qu	Ph.D., National University of Ireland	July 2001-present	B. Christ
Jai Rohila	Ph.D., Haryana Agricultural University, India	July 2006-present	Y. Yang
Sara Melissa Witiak	Ph.D., Penn State	September 2006-present	D. Geiser
Jamie Blair	Ph.D., Penn State	May 2005-May 2006	S. Kang & D. Geiser
Carla Garzon	Ph.D., Penn State	January-October 2006	M. Jimenez Gasco
Chang Hyun Khang	Ph.D., Penn State	June 2005-September 2006	S. Kang
SeongHee Lee	Ph.D., North Dakota State University	July 2006-July 2007	G. Moorman
Mizuho Nita	Ph.D., Ohio State University	July 2006-February 2007	E. De Wolf
Nadav Nitzan	Ph.D., Washington State University	May 2005-March 2006	B. Christ
Barrie E. Overton	Ph.D., Penn State	January 2005-June 2006	E. Stewart
Gnana Viji	Ph.D., University of Madras, India	July 2005-May 2007	M. Jimenez Gasco
Xiaolong Yang	Ph.D., Penn State	February 2004-February 2006	F. Gildow

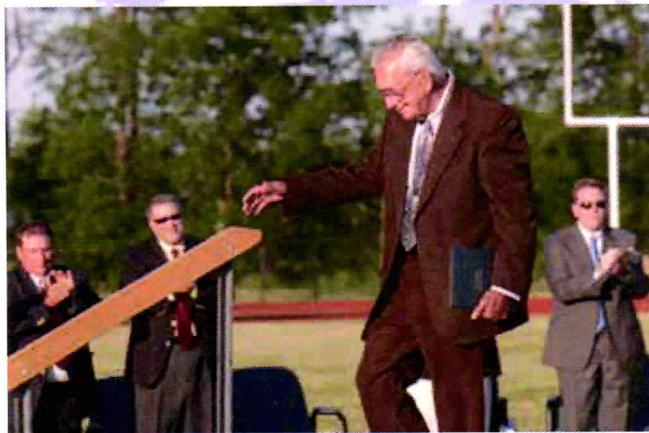
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Welcome, Grace O'Keefe

The Department welcomed Grace O'Keefe, USDA, APHIS, PPQ Domestic Identifier for the Eastern Region, in December 2006. She is located in Buckhout Lab and has quickly established a number of cooperative endeavors with faculty in the department. The Plant Pathologist Domestic Identifier positions provide diagnostic support to Cooperative Agricultural Pest Survey (CAPS) programs within the USDA, Animal Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ) unit. The primary role of the Domestic Identifiers is to help states diagnose their Cooperative Agricultural Pest Survey (CAPS) samples. In addition, this year her lab at Penn State has been designated to receive suspect Potato Cyst Nematode (PCN) samples from the Eastern Region (ER) states participating in the PCN National Survey. Grace began her career as a Horticulturist with the New Jersey Department of Agriculture in 1979 and has held positions with the Georgia and Maine departments of agriculture. Most recently she was State Plant Pathologist for the Virginia Department of Agriculture and Consumer Services. Throughout her career, she has collaborated with the USDA, APHIS, PPQ, and other Federal and State agencies on a variety of issues. Grace is a graduate of Rutgers University.



◆◆◆News from Alumni and Friends◆◆◆



Walter Albright (retired Environmental Engineer for the Buckhout Lab facility) was honored by the Penns Valley Area School District in June 2006, when he was awarded his high school diploma. Walter was supposed to graduate with the class of 1944, but in June, 1943, he enlisted to fight in World War II. Walter and his wife, Dorothy, are doing well at their home in Spring Mills, PA, and the department was delighted that they were able to attend the department's 2006 Holiday party. Walter

has inquired about continuing his education in Plant Pathology.

G. G. Antoun, visiting scientist from the Soils & Water Research Institute, Giza, Egypt, sent greetings to the department and special regards to Lee and Lois Schisler. He fondly remembered Mildred Jodon and Harold Gummo, whom he worked with in the mushroom program when he visited here in 1984. Dr. Antoun is now an emeritus Professor at the Agricultural Microbiology Research Department; his daughter, who was a kindergartner when they were at Penn State, has graduated from the Faculty of Pharmacy, Ain Shams University; and his wife is still working in the Ministry of Agriculture. He is taking care of his mother in his retirement.

Lorraine Berkett (Ph.D. '85) and **Professor Emeritus Ken Hickey (Ph.D. '60)** were among those who attended field days at the Biglerville Fruit Research and Extension Center in July, 2006.

Marcos Camara (Ph.D. '99) sends greetings from the Universidade Federal Rural de Pernambuco (UFRPE), Brazil, where he is enjoying the tropical climate and teaching an undergraduate course in Plant Pathology and Mycology, and Molecular Plant Pathology for Masters and Ph.D. students.



Jairo Castano-Zapata (Ph.D. '81) - Jairo has been away from his Ph.D. alma mater for many years now and during that time has distinguished himself through his academic scholarship. He has achieved the rank of Distinguished Professor at the Universidad de Caldas, Manizales, Columbia and on the 23rd of August 2006 he received from the Colombian Academy of Sciences: "Prize To The Integral Life of A Scientist." The prize was conferred at Bogota, Columbia, by Doctor Jaime Rodriquez-Lara, the new President of the Columbian Academy of Sciences, and the Rector of the University of Caldas; Manizales, Doctor Bernardo Rivera-Sanchez.

Nora Catlin (M.S. '99) - Nora is the Floriculture Specialist for Cornell Cooperative Extension of Suffolk County, NY. She serves as extension agent as well as conducts research to support the local greenhouse and floriculture industry.

Priscila Chaverri (Ph.D. '03) - Priscila is living in Maryland and enjoying life with her one and a half year old son Omar. She is an assistant professor in the Department of Biology at Howard University. Priscila currently is researching endophytic diversity in rubber trees and conducting monographic studies in the Nectriaceae, Hypocreales: Cosmospora, Nectria and Neonectria thanks to two NSF grants. Priscila was in State College in May 2006 with some of her students to attend the Mid-Atlantic States Mycology Conference.



Gregory Clarke (M.S. '88, Ph.D. '92) - Greg currently is a Field Research and Development Scientist for Valent BioSciences (formerly Abbott Laboratories). Since his days at PSU, Greg has been doing field development of plant growth regulators and biorational products in the Northeastern U.S., working mostly in tree fruit. Greg, his wife, Carrie, and their five children live in Dillsburg, PA."

Thomas Cynkar (B.S. PLTSC '86) - Thomas sends his greetings and contact information so if you would like to contact him let us know. He is now a Technical Director for EDVOTEK, Inc.

He explains that “my company is a manufacturer of biotechnology education kits and equipment-- if you ever come across a need for any teaching tools, I would love to work in conjunction with you. Our website is www.edvotek.com. My family absolutely loves visiting State College and the campus and my two kids, Hunter, age 12, and Noah, age 10, have their hearts set on attending PSU in the not-so-far-off future. If they do attend, I hope they enjoy the experience as much as I did! Thanks and take care.”

Jim Demski (Ph.D. '66) sent the enclosed photo of himself (*left*) and **Bob Schmidt (Ph.D. '64)**. Jim received his Ph.D. under John Boyle and is now retired from the University of Georgia. He and Bob recently toured areas of the Lewis and Clark trail.



Justin Dillon (M.S. '04) - Justin is a partner in his fifth generation family beef farm. In addition to helping run the farm, he received his Certified Crop Advisors certification in 2006. Justin currently is a Research Support Assistant in the Crops and Soil Sciences Department at Penn State, where he is researching forages, pastures, and nutrient management.

Padruot Fried (Ph.D. '77) - Padruot sent his regards, best wishes for the coming summer, expressed his appreciation to Becky for the newsletter and sent his new contact information which is: padruot.fried@gmx.ch.

Jozsef Geml (Ph.D. '04) - In 2006, József, his wife (Johanna), and their daughter (Maya) celebrated the birth of their son, Táltos. József continues his project on the molecular evolutionary ecology of boreal and arctic fungi at the Institute of Arctic Biology, University of Alaska, Fairbanks. Also in 2006, József received a three-year University of Alaska Presidential International Polar Year Postdoctoral Fellowship to work on the circumpolar phylogeography and genetic diversity of arctic fungi.

Claire Gesalman (M.S. '77) - I don't know if you had this info: I am chief of the Communication Services Branch of the Office of Pesticide Programs at the U.S. Environmental Protection Agency in Washington, D.C. If anyone wants to contact me regarding pesticide issues, my work phone is 703.308.3260; email address there is gesalman.claire@epa.gov .

Jeff Huether (Ph.D. '73) received the 2006 Award of Merit from the Northeastern Division of APS during their Fall 2006 meeting in Burlington, VT.

Kelly Ivors (Ph.D. '02) - Kelly is an Assistant Professor and Extension Specialist in the Department of Plant Pathology at North Carolina State University. She conducts research and extension programs on all of the important crops grown in the western part of North Carolina. She currently is working on a multi-state USDA-NRI research project with PIs from Penn State (Kang and Geiser) involving the development of a *Phytophthora* database.

Roger Kaiser (Ph.D. '80) - In his career in the agrochemical industry, Roger has held positions in all phases of pesticide discovery and development and has had experience working with fruit and vegetable crops, row crops, turf and ornamentals. Most recently, Dr. Kaiser held the position of Product Development Manager, Fungicides at Bayer Cropscience. At Bayer/Aventis/Agrevo Roger played important roles in the development of a number of fungicides and served as project leader for development of pyrimethanil in the U.S. Previously, Dr. Kaiser held research and field development positions with ISK, Monsanto, and Diamond Shamrock.

Roger joined Valent BioSciences Corporation on January 29 as a Product Development Manager. His experience in plant protection research and development, combined with his strong technical background, will help strengthen VBC's product development efforts and reinforce VBC's leadership position in biorationals around the world. Roger will be located in the Libertyville office and can be reached at 847 968 4744. He is excited about his new position and the company and invites visits to their web site for those who wish to learn more www.valentbiosciences.com.

Chang Hyun Kang (Ph.D. '05) - CK and his wife and their son, Sam, are enjoying Kansas State. CK currently is a post-doc with Dr. Barbara Valent, studying the mechanism of secretion of rice blast effector molecules inside living rice cells to determine the how the fungus delivers effector proteins and what proteins are delivered.

Bill Kleiner (M.S. '88) - Adams County, PA, Cooperative Extension Director and senior extension educator in Adams County, was appointed Regional Director for the Southeast Region, Pennsylvania Cooperative Extension, effective January 2, 2007. Bill was honored for his years of service at the 91st annual meeting of the Adams County Cooperative Extension Service in October 2006.

Zhaowei Liu (post-doctoral scholar from 1997-2000) - Zhaowei and his wife, Qingping, moved to the Washington, D.C. area where they now both work. Zhaowei writes, "Things are going very smoothly and very well with us. We moved to a new home in Silver Spring, MD, recently. We enjoy the location (which is a few miles from Qingping's work and about 14 miles from my lab), the community and house very much – after forgetting the price and mortgage payment! Qingping obtained a position as a biologist in a virology lab at NIH in Bethesda, Maryland. She enjoys her job and the academic settings at NIH. I will have been working a year for USDA-APHIS at the end of May. My focus is on methods for the detection of plant pathogens. It is a very pleasant and challenging job and one for which I was perfectly designed based on my collective experiences as a postdoc in the Department of Plant Pathology at PSU and as an R & D scientist of molecular biology at a State College company. I will present my work on the development of microelectronic chip technology for detection and differentiation of Plum Pox at the APS meeting in San Diego this summer. Our daughter Leah is serving as a Penn State Senator this semester and is campaigning for the post for the next term. Leah recently received the Goldwater Award, which includes a financial scholarship. She will be working as an intern at the National Cancer Institute in Bethesda, MD, this summer for which we are pleased as she will be able to spend the summer with us at home.

Bangya Ma (Ph.D. '06) - Bangya recently moved from State College to North Carolina where she holds a joint position of research associate between North Carolina State University and BASF. She monitored fungicide resistance last year and now provides technical service supporting for the BASF Turf and Ornamental business.



Michele Mansfield (Ph. D. '05) - Michele and her husband, Phil, are the proud parents of a one-year old son, Alex. Michele is working on a two-year post-doc with Dr. Kang and Dr. Geiser on the phylogenetics of *Phytophthora* species with emphasis on molecular characterization of potential new species of *Phytophthora*.

Wally Marasas, former Adjunct Professor of Plant Pathology, retired from the South African Medical Research Council (MRC) in October 2006 after 32 years of service. Wally sends his thanks for the many years of collaboration, and support, and friendship during his professional career.

Sara (Mahoney) May (M.Agr. '03) - Since graduating Sara has been working as a research technologist for Dr. Barbara Christ's potato research project at PSU. She assists in all areas of research and extension for the project; however, she focuses on the use of green manure crops as biofumigants against soil-borne pathogens. She also spends part of her time assisting John Peplinski in the Plant Disease Clinic and is involved in the National Plant Diagnostic Network (NPDN).



Julio Molineros (Ph.D. '07) - Julio has a post-doc at Ohio State working with Anne Dorrance, Larry Madden, and Pierce Paul on joint projects. He currently is investigating the epidemiology of bean pod mottle virus and soybean rust. He is analyzing spatial patterns in BPMV and defining protocols for soybean rust, which will be validated in Louisiana and Florida this summer.

Jim Moyer (Ph.D. '75) was elected Vice President of the American Phytopathological Society—his term began at the 2006 APS/MSA meetings.

Harry Muthersbaugh (retired staff, Mushroom Research Center) –“Thanks for sending me the Annual Newsletter. It's always interesting to read what people are doing, etc. It doesn't seem possible that I retired 11 yrs. ago!” Harry wishes all his friends in Plant Pathology excellent health. Harry is retired but very active. “RETIRED, but **very** busy as a Trustee in our United Methodist Church, where we're also well known as Penn Staters, plus helping our daughter out occasionally, as she home schools plus spending as much time with all our grandchildren as we can. I also schedule a lot of time for fishing. I do keep a watch on the local mushrooms; supplies and quality, which are actually very good.”

Upeksha Nanayakkara (Ph.D. '06) - Upeksha and her husband have taken positions in New Brunswick, Canada, and are learning French along with their daughters. She is a post-doc working with a grant from New Brunswick Department of Agriculture on pink-rot of potatoes caused by *Phytophthora erythroseptica*. Upeksha is working on developing a PCR-based detection method of pink-rot from soil.

Philip Northover (M.S. '98, Ph.D. candidate) - Phil has been working as the Farm Production Extension Pathologist for the Canadian province of Manitoba since 2002. He is responsible for providing pathology extension support to vegetable, fruit, and ornamental producers, as well as crops grown for seed, and forage crops. He also functions as the back-up for the Crop Diagnostic Clinic Diagnostician.

Manuel D. Ospina-Giraldo (Ph.D. '98) writes, "I got a tenure-track faculty position at Lafayette College, in Easton, PA. I teach genetics, genomics, mycology, and an introductory course in plant pathology. I'm also involved with the general biology course. **Cosima (Wiese) (Ph.D. '01)** is doing fine: she got tenure and is department chair of biology at Misericordia College."

Barrie Overton (Ph.D. '04) - Barrie is in his first year as Assistant Professor of Biology at Lock Haven University of Pennsylvania. He is busy teaching general biology, plant pathology, and soon mycology! In his first year at LHUP he guided two undergraduate students' research. Barrie will be hosting the Peck Mycological Workshop and Foray in Pennsylvania September 2007, marking the first time in the 54 years of the foray's history that it will be held in Pennsylvania.

Payungsak Rauyaree "M" (Ph.D. '03) - "My news or note to share? Let me begin with my trip to China during late September in 2006, for a research cooperation meeting in Hainan province. Me, my boss and other two researchers visited the Institute of Tropical Bioscience and Biotechnology, Chinese Academy of Tropical Agricultural Sciences in Hainan province and also the International Cooperation Division of Science and Technology of Hainan province for research planning and cooperation. The trip was successful as we finally arrived at two possible projects relevant to Biotechnology: one is on developing tissue culture techniques and another is studying microorganisms useful for agricultural purposes. They are still in the process of getting approval from the National Research Council of Thailand." M closed his messages with, "Nothing much to say but still missing all my friends there."



Jeff Smeenk (M.Agr. '92) writes, "Here is a voice from the past. The '05 copy of the PSU Plant Path newsletter finally caught up with me. After leaving PSU in '86, I worked with Walt Disney World in Florida as a contract plant pathology researcher. From Disney I took a technician position at Michigan State University. In addition to working as an Agronomy Technician for 16 years, I also completed my Ph.D. in Sustainable Agriculture. I am now an Assistant Professor of Horticulture and Extension Horticulture Specialist at the University of Alaska - Fairbanks. I enjoyed reading about some of my fellow students and my former professors." Jeff included his e-mail address: jeff.smeenk@uaf.edu.

Sam Smith (Department Head 1976-81) - "Pat and I now live in Seattle and are involved in a number of education and art organizations. Our son, Pete, and his family are in Arlington, Texas. Our daughter, Linda, and her husband live here in the Seattle area. As President Emeritus of Washington State University I am enjoying helping them with fund raising and keeping in contact with our alumni. We had the pleasure last Winter of visiting with T.A. and Joan Toussoun in Southern California."

Emelie Swackhamer (B.S. '86 PLTSC) received the Distinguished Service Award from the National Association of County Agricultural Agents (NACAA) at the 2006 meeting in Cincinnati, OH. Emelie is an Extension Educator in Lehigh County, PA.



Jim Tammen (Department Head 1963-75; Professor Emeritus 06-) – “This has been a great year, my eighty first! Great health, great family, great friends and great travels. I have been back in Happy Valley for two years now and am enjoying it immensely, especially now that I have permanently located just one block from the Nittany Lion Inn and golf course (my golf has improved from terrible to awful). I am within walking distance of good ol Buckhout where I mooch a cup of coffee there at the Department’s expense

regularly. I cannot mention the Department without telling of the great honor they paid me recently by successfully seeking an exception to University policy on the granting of emeritus status and with the approval of the President, the Dean of the College and the faculty of the Department I am now Professor Emeritus of Plant Pathology. You can certainly imagine how deeply pleased I am! I had the opportunity to express my warmest thanks to many during a special reception held to present the award, but, now let me take this opportunity to give my heartfelt thanks to everyone. My best wishes go, too, to all of you and to your families. It would be great to hear how things fare with you--so write!”

Gro Torsethaugen (visiting scholar and post-doc 1994-99) sends her greetings and thanks for receiving the Annual Newsletter from the Department. “I enjoyed it very much, especially reading about old friends from my time in the Department. I still live in Howard. I teach two classes on-line for the World Campus at Penn State, while I am being a full-time Mom for my son Anton. He is growing up fast and will be starting Kindergarten in the fall!”

Jorge Vivanco (Ph.D. '99) visited the Penn State campus in early spring to present a Seminar in the Entomology department. Jorge currently is Associate Professor of Rhizosphere Biology in the Department of Horticulture and Landscape Architecture at Colorado State University. A number of people from the department had a chance to hear Jorge’s seminar and say hello.

Jacquie (Smith) van der Waals (visiting scientist from South Africa) - Since her time in the department, Jacquie married Johan van der Waal and they now have two lovely children; Andrew and Allison, a home, busy professional lives, and a very active Labrador retriever. Jacquie was recently transferred to the Microbiology and Plant Pathology department which entailed a change in office location and an increase in the work load. Husband Johan was recently awarded a Ph.D. degree and in addition to his regular day job, he and a colleague started a consulting company. The Drs. J van der Waals are having a fulfilling and busy time of it and send their greetings.

Chris Wallis (M.S. '04) - Chris and his wife and their daughter, Sarah, (age 4) have welcomed two new additions to their family since their time at PSU, Rosemary (2) and recently son Timothy. Chris is finishing up his Ph.D. at Ohio State, where he has been researching induced resistance in pine.

Greg Watson (M.S. '82) and Eileen King (Ph.D. '82) – “The Watson family is still enjoying living in Greensboro; we love living on Lake Jeanette and the climate and activities that Piedmont, NC, make available. Greg is on the Lake Jeanette Homeowners Association Board, working mainly to manage the environmental health of the lake and keeping the residents from cutting down all the trees surrounding the lake. We are still working for Syngenta. Eileen is leading a New Ventures team trying to establish new business models in cotton, vegetables, and other crops. As of January 1, 2007, Greg is leading the NAFTA Fungicides & Insecticides Team in Regulatory Affairs after leading the State Regulatory & Federal Label Support team for the last two years. Both our jobs are fun and are full of challenges. Greg is also the current President of the Greensboro College Alumni Association and had the opportunity to do a reading at the recent Lessons and Carols service at the College.

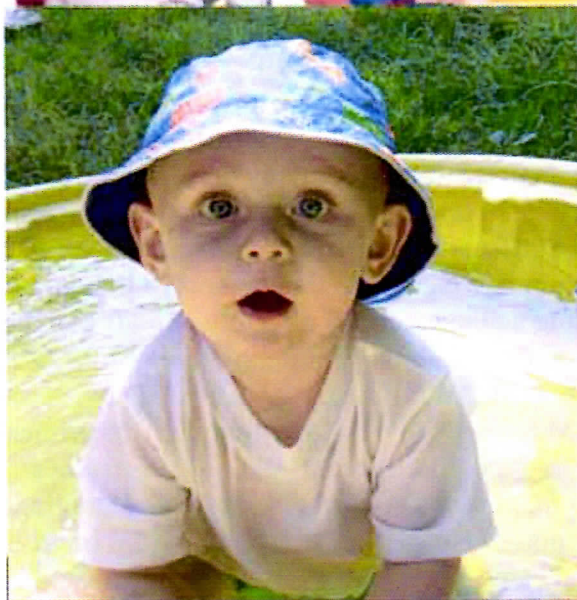
“Our oldest son, Kemper, is in his second year of high school and loves to play guitar; his Christmas gifts were around microphones, speaker set up for vocals, and a small voice mixing board. Kemper will turn 16 on January 22 so the driving thing is not far away. Banning, our youngest son, is in 8th grade at a local private school and is currently trying to decide where he'd like to go to high school. Banning is playing basketball on his school team, just switched from keyboards to guitar (yeah, he is 13 now), and still is working toward his youth black belt in karate. We enjoyed a trip to California for our main vacation last year (San Francisco with stays at Yosemite, Kings Canyon, and Sequoia National Parks). Since the kids had different spring breaks, Banning and Greg went to Arizona for spring training baseball combined with a quick trip to the Grand Canyon (first time Greg had seen it in snow). We're off to see the Red Hot Chili Peppers in Raleigh next week and are looking forward to seeing the NCAA basketball tourney 1st & 2nd rounds in Winston-Salem in March.”

Fritz Westover (M.S. '04) - Fritz worked as the viticulture research-extension associate for Virginia Tech, but recently moved to Houston, TX, to serve as the Viticulture Extension Associate for the Texas Gulf Coast. He is working with established vineyards as well as expanding the industry by helping potential growers to establish their vineyard.

Inigo Zabalgogea (Ph.D. '92) - Inigo sends his best wishes to everyone for a good year.

Larry Zang (M.S. '84) – “I still work for Syngenta Crop Protection in Greensboro, NC, in State Regulatory Affairs, married and have two kids, a boy 15 and girl 13. We live at 6005 Beckenham Way, Oak Ridge, NC 27310.”

Nik Zitomer (Ph.D. '06) - Nik is as a Post-Doctoral Research Associate working for the USDA Agricultural Research Service as a Research Toxicologist. He is working on determining characteristics of abrin (a plant toxin closely related to ricin) to develop a quick screen of contaminated food. He loves Athens, GA, and his position!



Plant Pathology's Latest Extended Family Members:

Top:

Ravindu Ashau Wijeratne-13 Jan 2006

Daniel Felipe Marelli- 15 Aug 2006

Kaia Khawaja Brown- 2 July 2007

Middle:

Alexander Philip Mansfield- 26 June 2006

Cooper Issac Schall- 28 Sep 2007

Bottom:

Jozie Rae Reed- 12 Oct 2006



Richard R. Nelson Memorial Lecture

Dr. Jan Leach, University Distinguished Professor of Plant Pathology at Colorado State University, and 2006-07 President of APS, visited the Penn State Department of Plant Pathology on April 16, 2007, to present the first annual Richard R. Nelson Memorial Lecture. Her seminar, entitled "Approaches to Broad-spectrum, Durable Plant Disease Resistance," was the first in an annual series of lectures focusing on host-pathogen genetics. This endowed lecture series was established in memory of Dr. Richard R. Nelson (1926-1991), who had a distinguished career as a member of the Penn State Plant Pathology faculty from 1966 until his retirement in 1985. Penn State bestowed its highest faculty distinction on Dr. Nelson in 1974, when he was named Evan Pugh Professor.



Laurence D. and Mary Anne Moore Faculty and Staff Award in Plant Pathology



Dr. Larry Moore (Ph.D. '65) visited the department as our special guest at the annual awards ceremony on January 26, 2007. Larry was on hand to announce the Laurence D. and Mary Anne Moore Faculty and Staff Award in Plant Pathology at Penn State. The purpose of their endowment is to fund an award to honor and recognize outstanding achievement by a faculty or staff member in the Department of Plant Pathology at Penn State.

Larry received his M.S. and Ph.D. degrees from this department; his doctoral thesis, entitled "Pectic and Cellulolytic Enzymes Associated with *Pythium ultimum*-blighted Highland Bentgrass," was under the direction of Houston Couch. Larry went on to have a distinguished career at Virginia Tech, and recently retired from VT as Professor Emeritus.

The department extends its gratitude to Larry and Mary Anne for their generous gift to their alma mater. Thank you!



◆◆◆Alan A. MacNab Endowments◆◆◆

- The Alan A. MacNab Plant Pathology Memorial Endowment has been established to provide funding for vegetable research. The Pennsylvania Vegetable Growers Association initiated this endowment to recognize Alan's contributions to their industry and to provide a continuing source of funds for vegetable research.
- The Alan A. MacNab Scholarship endowment has been initiated by Alan's family in honor of Alan's wishes to help and encourage undergraduate students interested in agriculture.

◆◆◆Endowments in Plant Pathology◆◆◆

Thank you to our alumni and friends for your contributions to the endowments in Plant Pathology. Your support and your generosity make possible many activities that enrich and enhance our programs.

Leonard J. Francl Memorial Endowment in Plant Pathology

Albert Hildebrandt Botany Library Endowment

Arthur Gaspari Memorial Scholarship

Alan A. MacNab Plant Pathology Memorial Endowment

William Merrill, Jr. Memorial Endowment

Harold J. Miller Memorial Endowment

Laurence D. and Mary Ann Moore Faculty and Staff Award in Plant Pathology

Henry W. Popp Graduate Assistantship

James Oscar Watts Memorial Potato Research Endowment for Plant Pathology

James P. Roberts Scholarship

Lester P. Nichols Memorial Award

Mushroom Industry Endowment for Penn State

Plant Pathology Graduate Studies Enhancement Fund

If you would like to contribute to any of our endowments, please send your gifts in care of the Department of Plant Pathology, 212 Buckhout Lab, University Park, PA 16802. Please make checks payable to The Pennsylvania State University, and please be sure to specify which endowment you wish to support.

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Editors' Note. We hope you enjoyed the 2006-07 edition of the Penn State Plant Pathology Newsletter. Please keep in touch! Send your news and notes for the 2007-08 edition to bpeplinski@psu.edu. We'd also appreciate your help in keeping our mailing list up to date. If your address changes, please let us know by e-mail or postal mail to 212 Buckhout Laboratory, University Park, PA 16802.

Best Wishes for a Safe & Happy Holiday Season!

(below) Holiday Party, December 2006



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