



# STATION NEWS

New York State Agricultural Experiment Station, Geneva, New York

VOLUME LXXXVII • NO. 15 • Aug. 18 - Sept. 1, 2006

## Harvey Hoch Receives Distinguished Mycologist Award



H. Hoch

Harvey Hoch, professor of plant pathology, and chair of the department, has received the Distinguished Mycologist Award for 2006. The award is made annually to an individual who has established an outstanding career in the field of mycology; it is one of the highest awards bestowed by the Mycological Society of America (MSA). Nominees for the award are evaluated on the basis of quality, originality and quantity of their published research, and their service to the MSA or to the field of mycology in general. The Award was made at the joint meeting of the MSA, the American Phytopathological Society and the Canadian

Phytopathological Society which was held July 29 – August 2 in Québec City, Québec.

“Harvey Hoch has been recognized throughout his career for innovative research and excellence as a mycologist,” said Station Director Tom Burr. “The Distinguished Mycologist Award is yet another honor for which Harvey is highly deserving.”

“Harvey is always described by phrases like ‘the most creative,’ ‘the most innovative,’ ‘the most original in the history of the MSA,’” said Jim Anderson, Past President of MSA in making the award. “Of course Harvey’s work on how fungal pathogens sense the physical characteristics of their host plant surfaces is most famous. His leadership in micro fabrication and nano technology provided wonderful and elegant tests of specific hypotheses of how pathogen interact with their plant hosts.”

Anderson added that interest in Harvey’s work extends far beyond the field of Mycology to all of biology. “Although, in Harvey’s words, he has now ‘gone over to the dark side’ in working with bacterial pathogens of plants, he remains a core MSAer, and one of the very best in the business,” he went on to say. “The MSA is proud indeed to make this award.”

Hoch was cited for his work on the ultrastructure and cell biology of fungi, the use of high resolution microscopy, particularly the use of freeze-substitution to reveal the true ultrastructural nature of the fungal cytoplasm, and his efforts to understand how fungi can sense and use leaf surface topology as markers to guide them in the successful

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## Helene Dillard Named APS Fellow



H. Dillard

In acknowledgment of her distinguished contributions to plant pathology, Helene Dillard was elected a Fellow of the American Phytopathological Society (APS) at the international organization’s 98th annual meeting held July 29 – August 2 in Québec City, Québec. Fellowship is a recognition granted to only a relative few society members.

“This is one of the highest honors of the society and reflects the great respect that plant pathologists worldwide have for Helene as a scientist, educator and leader,” said Station Director Tom Burr. “She has maintained a world-class research program throughout her career and at the same time has served most effectively as a department chair, associate director and now director of Cornell Cooperative Extension. The University and our stakeholders benefit greatly from Helene’s skills and strong work ethic.”

Fellowship is based on significant contributions in one or more of the following areas: original research, teaching, administration, professional and public service, and/or extension and outreach. Dillard’s work fulfills all of the criteria.

Born, raised and educated on the west coast, Dillard received a B.S. in biology of natural resources in 1977 from the University of California at Berkeley, an M.S. in soil science and a Ph.D. in plant pathology, both from the University of California at Davis in 1979 and 1984.

Upon completion of her graduate studies, Dillard’s career began where the sun rises, in the east, when she joined the faculty of the department of plant pathology at the Station as an assistant professor with research and extension responsibilities for vegetable crops. In 1990 she was promoted to associate professor and in 1997 she began a four-year term as chair of the department. The following year she rose to the rank of professor.

In 2001 she became associate director of Cornell Cooperative Extension, overseeing all of the agricultural extension programs

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(HOCH AWARD, continued)

penetration of the plant tissues. It was also pointed out that he made a major effort to disclose the relationship of the microtubule cytoskeleton to the thigmotropic signal needed for appressorium formation and to elucidate fine details in the development of infection structures, and that his lab's work on thigmotropism in *Uromyces* embodies all the attributes of a modern classic having garnered the interest and fascination of mycologists and non-mycologists from a very broad spectrum of research.

"He is truly a 'world-class' researcher as well as an outstanding speaker who has given invited presentations at meetings and universities all over the world," reads an excerpt from one of the award nomination letters. "Dr. Hoch's CV is aglow with not just one of the requisite hallmarks of a Distinguished Mycologist, but all of them – quality, originality and quantity of published research, and service to both MSA and the field of mycology in general," reads another.

Hoch has published more than 100 peer reviewed papers and chapters in scientific journals and books. In 1994 he received the Ruth Allen Award from the American Phytopathological Society (APS), and was elected a Fellow of that society in 2002. He has supervised numerous students and post-doctoral fellows and has hosted an international cadre of visiting scientists through the years. He has also served many professional societies and journals, including terms as Associate Editor for *Phytopathology* and the *Canadian Journal of Microbiology*, a member of the editorial board for *Mycologia*, a panel member on the NSF Cell Biology program, MSA and APS representative to the Biological Stain Commission, councillor on Cell Biology/Physiology for MSA, Chair of the MSA Committee on Phytopathology, and various other committees on plant protection, diseases, nanotechnology, root infections, collections and germplasms.

Hoch received a B.S. (Botany) in 1965 from Colorado State University, an M.S. (Plant Pathology/Soils) in 1967 from Colorado State University and his Ph.D. (Plant Pathology/Soils) in 1972 from the University of Wisconsin, Madison. He came to the Station in 1974 as a research associate in the department of plant pathology, was promoted to assistant professor in 1977, associate professor in 1982, and professor in 1990.

J. Ogradnick

(DILLARD, continued)

within the University. In less than a year she was selected for the position of director, overseeing 1,700 employees with an annual budget of \$120,000,000.

"Throughout her administrative rise, Helene has remained a plant pathologist. Getting into the field to assess disease brings her back to her roots. Impossible as it seems, she finds time on a weekly basis to leave her Ithaca-based director's role and travel to Geneva where she maintains her department office and laboratory," reads an excerpt from Dillard's letter of nomination. The letter goes on to prove instances of her most recent work, such as studying the vulnerability of snap beans to soybean rust and drafting a Section 18 emergency exemption request for fungicides that control soybean rust on snap and dry beans in New York State.

Her research program focuses on the biology, ecology and management of fungal pathogens of vegetable crops. Emphasis is placed on the epidemiology of foliar pathogens, sustainable disease management strategies, disease management in transitional and organic cropping systems, control of pathogens in greenhouse vegetable crops, and culinary and medicinal herb diseases.

Dillard was recognized previously by APS for Excellence in Extension in 1992 and by the New York State Association of County Agricultural Agents the preceding year. In 1995 she was nominated to participate in the National Extension Leadership Development program.

"We are excited that Helene has been recognized for her hard work and dedication," said plant pathology Chair, Harvey Hoch. "Every time one of our faculty members, students, or staff are recognized for impacting contributions to society it reflects on the department. It shows that we are in the forefront of serving agriculture, the University and College, as well as our professional society."

APS is a non-profit, professional, scientific organization dedicated to the study and control of plant diseases.

T. Krakowiak

## Frank A. Lee Celebration

Staff, faculty and students of the Station community were joined by former faculty and staff in a celebration of the naming of the Frank A. Lee Library and the placing of a plaque near the entrance to the library. Both honors are in recognition of former Food Science Professor Frank A. Lee bequeathing at the time of his death in 1999 \$2.3 million to the Library at the Experiment Station.

Frank Lee joined the Station as a chemist in 1936. He was particularly known for his research on freezing and blanching food. He spent long hours in his lab and in the Station Library, even after his retirement in 1967.

He specified that his gift be used to build the Library collection. The Experiment Station Library served him well during his research years, but occasional budget cuts which resulted in journal cancellations frustrated him. Recognizing the importance of an excellent library in support of excellent research, he made a gift that will be of great benefit to future researchers.

Professor Lee most likely never had the slightest inkling that journal articles would someday be deliverable over a network via a computer. But, the combination of this gift and the advent of e-journals and other networked information resources, gives the Station community access to a larger collection of journals, books and other scholarly content than at any time in the past.

Memories of Professor Lee were shared by Professor Emeritus Bob Shallenberger. He described Professor Lee as secretive, unforgettable, and finally, grateful. He was secretive in that he shared little about his personal life. An example of being unforgettable, Bob related that Frank Lee's "laboratory partner in Sturtevant Hall once stated that when he told a fellow scientist some of the lore surrounding Frank, the fellow drove from Chicago to Geneva just to confirm that Frank was real." Shallenberger concluded by saying that Frank Lee was very grateful for the help he received from Library personnel.

Former Director Don Barton, as well as former Lee colleagues Bob Labelle and Terry

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## MEETING

### CHAIRS' MEETING

**DATE:** Tuesday, August 22, 2006

**TIME:** 8:30 AM

**PLACE:** Director's Office

## CLASSIFIEDS

**FOR RENT:** Comfortable, fully furnished three-bedroom sabbatical home for responsible individual or family. Nice bath, modern kitchen, office, full laundry, off-street parking in quiet neighborhood. Walking distance to Experiment Station (one mile), schools, hospital, and Madia's. Available mid-October 2006 through early May 2007. Attractively priced at \$500/month plus utilities. Email Doug at dck2@cornell.edu or call 315.521.3669.

**FOR SALE:** 1999 Ford Taurus. Excellent condition. 3.0 L V6. 27-29 mpg. \$3,200 or best offer. Call Dave Gadoury at 789-8112

**FOR SALE:** 1991 West Wright Potter Sailboat. Includes 1991 Shore trailer, original users guide, swim ladder, paddle, gaf hook, porti potti, anchor, extra ropes and ALL sails. Tan Bark main sail, genoa, jib, multi colored spinnaker. \$4,000. ALSO: 2004 2.5 HP Mercury Motor. Less than 4 hours run time. \$600. Contact Donna at dmb62 or call 585-637-6673 or 585-315-9021

**FOR RENT:** 1/2 house at 130 Cherry Street, 1 mile from Station. Two bedrooms, washer/dryer hook-up. Garbage pick-up included, off-street parking, no pets, no smoking. Available Sept. 1. \$475 plus utilities. Contact Michele Kaufman at x2419 or 781-2489 (evenings)

**FOR SALE:** Dodge Caravan 2000. \$3,900 Good Condition. Cash only. Available July 15th. Mileage 122,000. Please contact Gabino Reginato at ghr4@cornell.edu or (315) 781-0670 between 6 - 10 PM

**FOR RENT:** Spacious 2 Bedroom Apartment Available on Milton Street, 5 blocks from Hobart and William Smith Campus, 1 block from the heart of downtown Geneva, and a 20-25 minute walk (5 minute drive) to the Station. Apartment is unfurnished, has all wood floors, 1 bath and on street parking. No pets or smoking. \$450 + utilities. Contact: Dia Mohan at 315-759-5242 or Alex Da Costa at aed4@cornell.edu

**FOR SALE:** Log Home. Approximately 1 acre lot overlooking Seneca Lake, 3-4 bedrooms, large sunporch (12x31) with gas fire place, large established perennial gardens, front, side and back decks, 1 car + garage. 12 miles from NYSAES. Penn Yan Schools. \$159,900. Contact Jane Irwin at mji4@cornell.edu or 315-730-0082

**FOR RENT:** Cottage, west side of Seneca Lake, 3.5 miles from Geneva, furnished, two bedrooms, large deck, great beach front, private. Weekly rental available in August and September, \$1,500/wk, deposit required. No pets, no smoking, no huge reunions/parties. Perfect for quiet, small family gatherings. Contact rkcamera@gmail.com or dck2@cornell.edu



*The Station welcomed the National Grape and Wine Initiative Board of Directors to Geneva on August 9. Facilitators Amanda Garris, Acting Research Leader, USDA-ARS Grape Genetic Resources Unit, and Plant Pathology Professor Wayne Wilcox led productive discussions among the visiting business leaders and Cornell scientists about the role teachers, researchers and extension specialists, particularly here at Cornell, can play in furthering NGWI's aim to triple the size of the wine and grape industry by the year 2016. In the above photograph, Peter Cousins, (USDA-GGRU) leads a tour of the Cold Hardy Grape Collection.*



*time to a community project such as this. Then if that was not enough, Ed took a vacation day on Monday, August 7 to return to the site and pour the deck for the porch.*

*On Saturday, July 29, one of the hottest days of the summer, Ed Bailey (pictured above), John van der Weide and Gennaro Fazio along with some other Habitat for Humanity volunteers poured the basement floor in the Habitat build on West Avenue in Geneva. It was so hot that the concrete was setting up in the truck and would not slide down the shoot. These individuals under Ed's supervision persevered though, and got the job done. It takes real commitment to give up your Saturday and volunteer your*

*Habitat for Humanity Ontario County wishes to thank these skilled Station employees for their contribution to this project.*

### Geneva Grad Students Win Travel Awards

Three Geneva graduates students from the department of plant pathology were recipients of 2006 American Phytopathological Society (APS) Travel Awards. Megan Dewdney received the Robert W. Fulton Award, Nicole Russo, the William J. Moller Award and APS Council Award and Maryann Borsick, the Malcolm and Catherine Quigley Award and Kenneth and Betty Barker Award. The awards are funded through the APS Foundation.

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Acree, shared stories as well. In conclusion, Tom Burr expressed his appreciation for this generous gift to the Station community.

Special thanks go to Library staff members, Holly King, Mike Fordon and Jane Irwin for organizing the celebration, several staff members from the Administrative Services Center for helping with the event, and Director Tom Burr for his support.

*M. Schlabach*



## The Power of Sour

Professional athletes, weekend warriors, and health-conscious consumers can thank John Davey's Aunt Betsy for introducing him to the power of sour cherries. Davey, a former aspiring professional tennis player who was forced to retire due to acute back pain, first heard about tart cherries from his aunt in 2003. So promising was the potential for a natural cure, he quit his job as Wall Street banker to work with food scientists at Cornell University to create an all-natural juice.

Since then, Davey has launched his own health food company, and the New York Rangers use the drink after every game and workout. "Every athlete and baby boomer I talk to wants a case," said Davey.

Davey worked with Cornell food scientist, Olga Padilla-Zakour, to develop an all-natural tart cherry juice that retains its pain prevention and muscle damage recovery power in a shelf-stable product. Davey calls the juice and his company "CherryPharm."

CherryPharm's relationship with Cornell is having an economic impact in central New York. The company is buying Montmorency cherries from Pro-Fac Cooperative, Inc. (a grower-cooperative located in Rochester), and setting up a micro-processing and research and development facility in the new Cornell Agriculture and Food Technology Park in Geneva. They have hired a former Cornell graduate student in food science as director of product development, and will be hiring several people to assist with production. CherryPharm plans to develop other nutraceutical products.

"When John approached us, the goal was to retain the natural properties of the fresh tart cherries and have a product with great taste and convenience for consumers," said Padilla-Zakour, who directs the Food Venture Center (FVC) at the Experiment Station. "When we started out, the only alternative was cherry concentrate that had inconsistent quality, poor taste, and required mixing with water by the consumer."

The FVC provides entrepreneurs with expertise and regulatory assistance in developing value-added food products. Working with Davey, scientists developed a proprietary not-from-concentrate blend of tart cherry and apple juice.

"Olga has been invaluable to us in bringing her expertise in fruit processing and packaging, with the focus of retaining the phyto-nutrients in the final product," said Davey.

Davey's partner, Chris Shoemaker, a former Wall Street executive who played lacrosse at the University of Pennsylvania (the two men used to commute into New York City together from Summit, N.J.), said, "For entrepreneurs like us, working with Olga and Cornell is like having our own research and development team in our hip pocket. It gives us the credibility we need to compete in the international arena in the very competitive, specialty juice market."

Clinical trials conducted by Dr. Malachy McHugh, the director of research at the Nicholas Institute of Sports Medicine and Athletic Trauma (NISMAT), and Dr. Declan Connolly, associate professor and director of the University of Vermont's Human Performance Lab, have generated research results to prove that CherryPharm prevents muscle damage,



*Cornell food scientist Olga Padilla-Zakour (left) helped John Davey (center) and Chris Shoemaker (right) develop a natural tart cherry juice called CherryPharm in the pilot plant at the Experiment Station in Geneva. The muscle restorative will be produced at Cornell's new Agriculture and Food Technology Park.*

(SOUR, continued)

reduces strength loss, lessens pains, and allows the body to recover more quickly from intensive exercise.

The study, "Efficacy of a tart cherry juice blend in preventing symptoms of muscle damage," was published in the British Journal of Sports Medicine at the end of June. Co-authored by Connolly, McHugh, and Padilla-Zakour, the study shows strength loss was 22 percent with a placebo versus only 4 percent with the cherry juice.

Elite athletes who have tried the drink say it works. "The New York Rangers have integrated the proven benefits of CherryPharm's all-natural juice into the lives of our players—we feel less sore, sleep better, and recover faster," says New York Rangers' medical trainer Jim Ramsay, on the CherryPharm website.

CherryPharm hopes athletes at Cornell will also benefit from the muscle restorative properties of "big red juice," and is in discussion with the Cornell athletics department about its use.

The fortifying effects of CherryPharm are thought to be the result of phyto-nutrients and anti-oxidants like anthocyanin, melatonin, and quercetin that occur naturally and in high proportion in deeply colored fruits—particularly, in tart cherries.

The recommended dose of CherryPharm is one to two servings per day (morning and evening) but not during athletic performance. "It is not a hydration drink," said Davey. "It is a preventative and restorative."

Related World Wide Web sites:

<<http://www.cherrypharm.com>>[www.cherrypharm.com](http://www.cherrypharm.com)

<<http://www.nysaes.cornell.edu/necfe/>>[www.nysaes.cornell.edu/necfe/](http://www.nysaes.cornell.edu/necfe/)

<<http://www.thetechnologyfarm.com>>[www.thetechnologyfarm.com](http://www.thetechnologyfarm.com)

L. McCandless

**Congratulations** to Guixia Hao and Yong Han for the birth of a 7.98 lb baby boy (Albert) Wednesday morning. Guixia and baby are doing well. Guixia and Han will be in Geneva for about two weeks before traveling to PA where Han works.



(Continued in next column)