

CORNELL
UNIVERSITY

STATION NEWS

GENEVA
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NOVEMBER 20-DECEMBER 4, 1998

BRIEFS

WORKSHOP ON INTELLECTUAL
PROPERTY RIGHTS

A half-day workshop on "Understanding and Living with Patent Laws that Impact Marketing of Plants Genetically Engineered by Cornell Scientists" will be held at Jordan Hall, on the Geneva Experiment Station campus, on Wednesday, December 2, from 1:00-5:00 pm.

"The apple industry has funded many projects for the genetic improvement of apple varieties," said Director Jim Hunter. "Sponsors of research, faculty, and graduate students need to consider the implications of patent laws so research is conducted in ways that make it easier to bring genetically engineered fruit varieties into the marketplace."

In Session I, from 1:00-3:30 pm, presenters will include Jim Hunter, Dick Cahoon, Vice President and Associate Director of Patents and Technology for the Cornell Research Foundation, and Michael Goldman, an attorney who specializes in patent law. Topics will include traditional plant breeding, the rise of biotechnology, biotech and intellectual property (IP), the implication of IP for plant breeders/researchers and sponsors of genetic engineering research, patent fundamentals, patents on transgenic technology, freedom to operate, and commercialization issues using apples as an example.

Session II, from 3:30-5:00 pm, is for Cornell faculty, staff, students, Cahoon, Goldman, and USDA scientists to discuss details of IP.

The workshop is being held in conjunction with the annual meeting of the Apple Research and Development Program (AR&DP), a program funded by New York State apple growers that supports apple research. Members of the committee of the AR&DP will participate in Session I, and resume meeting with selected faculty to discuss research topics while Session II is in progress.

WINE AND GRAPE INDUSTRIES GENERATE
SUPPORT FOR GENEVA

In a check-passing ceremony held at GENEVA on Oct. 30, Bev Stamp, president of the Seneca Lake Wine Trail, presented a \$5,000 check to Kathy Russell, who is chair of the fundraising committee (pictured above) for the Cornell Vinification and Brewing Technology Lab.

Funding for the Cornell Vinification and Brewing Technology Laboratory (CV&BTL) under construction at GENEVA received a \$5,000 boost from the Seneca Lake Wine Trail on October 30, 1998. The money brought the contributions and services donated by industry in 1997-98 to over \$60,000. Two other recent contributions include \$1,000 from Lamoreaux Landing Wine, and \$618.56 from the Finger Lakes Wine Growers Association.

"This is exactly the kind of support from the private sector we need as leverage for state support for the Geneva Plan," said Station Director Jim Hunter, who attended the check passing ceremony. "Very often, we are asked what industry is doing to help support the Experiment Station. This project is a win-win partnership between the Station, industry, New York State, and Cornell. Together, we will not only get the facility built, but conduct the level of programs that wineries and breweries in New York need to build market share." The state contributed \$150,000 toward the construction of the facility in 1998.

"Everybody on the Seneca Lake Wine Trail understands the benefits of having technical expertise in wine making and grape growing close by," said Bev Stamp, of Lakewood Vineyards, who is president of the wine trail association. "Ours is a growing industry." She cited a 10-20 percent increase in tourism activity at the wineries in 1998, and reported that the 21-members of the Seneca Lake Wine Trail distribute 400,000 brochures a year—as many as Watkins Glen International. "It is a staggering reflection of the amount of interest and activity generated by the wine industry in our area," she said.

The funds were the profits from a Chocolate and Wine benefit held back in February—one of four trail-wide events held yearly.

Scientists at Cornell and industry personnel will use the new CV&BTL to develop uniquely New York wines, beers, meads, vinegars and other fermented products. Mark McLellan, director of the newly established lab, expects suppliers and manufacturers to use the space to place pilot scale winery and brewing equipment to run small-scale trials and offer operational and testing courses for people in the winemaking and brewing industries. Researchers, students, wineries, breweries, suppliers, and equipment manufacturers. (Continued on page 3)

ADDITIONAL REVENUES HELP STATION SERVE NEW YORK

This story is continued from last week's Station News where use of funds received in 1997 and 1998 was examined.

Why is \$600,000 Needed in 1999?

The initial request for \$2.8 million for equipment and other one-time expenditures has been reduced to \$1.6 million as a result of the appropriations over the last two budget years. In 1999, GENEVA is requesting another \$600,000 appropriation. The money will be used to purchase additional farm machinery to efficiently carry out field research, expand and develop research farms, install a much-needed irrigation system, and purchase additional lab instrumentation to equip new faculty, and replace outdated equipment used by senior faculty.

Some of the \$600,000 will be used for design costs and construction of an irrigation system that is part of a city-town-county-DEC-Station water detention project to mitigate flooding along the Castle Creek flood plain. This will create a pond of two million gallons, which can be used to irrigate Station farms. "This is a win-win proposition," said Associate Director Bob Seem. "The county is spearheading efforts to obtain state support for pond and dam construction; the Station must fund the irrigation system-pumps, controls, and over a mile of underground piping."

Additional monies will be used to expand research farm land. "The Station's needs for research plot land has increased over recent years," said Seem. "New field research was launched to test genetically transformed plants and needs more acreage to meet isolation requirements; the apple rootstock breeding program has been invigorated with support from the federal government; a projected AgTech Business Park could consume 78 acres; an amenity package for AgTech tenants may include access to field plots."

Why the Requested Boost of \$2.6 Million in GENEVA's Annual Budget?

At the core of the Geneva Plan is an increase of \$2.6 million in the annual appropriation to GENEVA to hire program leaders and support staff to accomplish the goals of the Geneva Plan. This request has been before the state government since 1997, and is being brought forward again in 1999.

The Geneva Plan maps out programs in research and extension that benefit producers,

processors, retailers, and consumers of fruit and vegetable commodities, as well as the state's turf industry. The Plan is a vision of how the New York State Agricultural Experiment Station, which carries out programs statewide, can better accomplish its mission to serve New York "from the farm to the fork."



In the food microbiology program at GENEVA, state funds were used by Randy Worobo to purchase molecular biology equipment to research foodborne pathogens and evaluate food safety.

Who Benefits from Investment in GENEVA?

In September, 1997, when Governor George Pataki visited the Station to award the first \$600,000 appropriation, he recognized GENEVA as a catalyst for growth and acknowledged the importance of "cutting edge experiments and research." He said the appropriation would fund important agricultural research to help New York farmers and food processors "prosper and stay competitive."

The governor recognizes what the agribusiness community has been telling him: Research conducted at GENEVA helps insure the viability of a wide variety of agribusinesses across the state as well as the future of fruit and vegetable growers and processors. GENEVA helps farmers remain competitive and stay in business, thereby contributing to the economic viability of rural communities across the entire state, and enhancing stewardship of the rural and suburban landscape. Others who benefit include consumers who have access to wholesome and fresh locally grown produce; entrepreneurs starting new food and related businesses including biotechnology companies; and future scientists trained at GENEVA.

In 1882, GENEVA's budget was

\$10,000 a year; in 1999, it is around \$20 million. A little less than half of GENEVA's funds come from the federal government and industry in the form of grants, contracts, and gifts. The other half comes to GENEVA through the SUNY budget and is committed for salaries and basic operating costs.

That means New York taxpayers fund slightly more than half of GENEVA's total budget per year. They receive a remarkable return on their investment: For roughly 50 cents per person per year, New Yorkers ensure themselves access to locally grown fruits and vegetables that improve their health, good stewardship of a significant proportion of agricultural land in New York State, and the economic viability of rural communities and agricultural industries that contribute \$22 billion to the state's economy.

In the 21st century, New York farms and food processing facilities will have to keep one step ahead of the weather, the insects, the diseases, the weeds, the waste, spoilage microorganisms, the global marketplace, and the competition. They will also have to be environmentally responsible, and learn how to continue producing crops while complying with state and federal regulations.

With the state's help and the help of our clients, GENEVA intends to be there for New York.

(SUPPORT, continued)

will share the lab, as well as educators, consumers, and national associations.

"We hope to do as much for the brewing industry in the next 20 years as we have done and will continue to do for the wine industry," said McLellan. In the last 20 years, New York has emerged as the #2 wine producing region in the country, behind California. There are 125 wineries in the state; 110 of which have been established since 1976, when the NYS legislature passed the Farm Winery law. In upstate New York, there are three large breweries with national reputations—Anheuser-Busch in Baldwinsville, F.X. Matt in Utica, and Genesee in Rochester—and 35 to 40 microbreweries, which are a growth segment of the industry.

UPDATE HOME ADDRESS

All employees are asked to update their home address as soon as possible through Employee Essentials on the Bear Access menu. W-2 forms will be sent to the address listed in Employee Essentials. If you are not able to use Employee Essentials to update your address, please notify your Department/Unit HR representative or call Human Resources, Jordan Hall, at x203.

JOB SEARCH WORKSHOPS

The following workshops may be offered in Geneva by Career Development Services, OHR: Resume Basics, Interviewing Skills, and Proactive Job Searching. Each workshop is one hour long and there is no charge.

In order to arrange the workshops which are of interest to Geneva employees, please indicate below the workshop(s) you would attend if held in Geneva. Questions may be directed to Geneva Human Resources at x210. Return to Human Resources, Jordan Hall.

JOB SEARCH WORKSHOPS

Sign-Up

Resume Basics Interviewing Skills

Proactive Job Searching

Name _____

Dept. _____ Phone Ext. _____

HORTICULTURAL SCIENCES SEMINAR

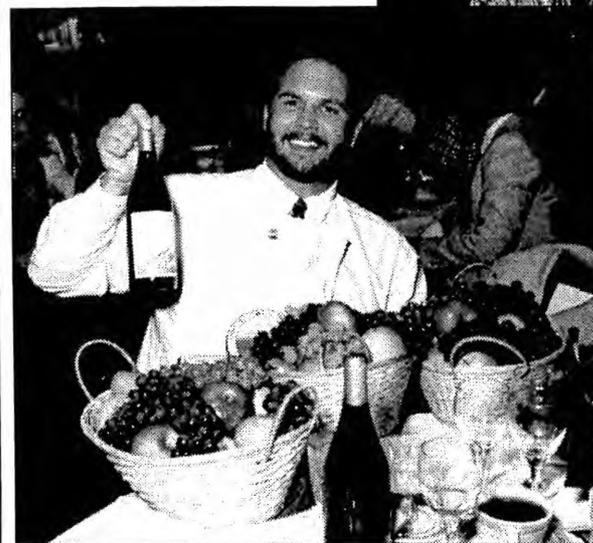
Monday, November 23

"Classical and Molecular Approaches to Breeding for Disease Resistance in Common Bean"
Dr. Geunhwa Jung, Department of Horticulture, University of Wisconsin, Madison

A challenge of plant breeding is to combine desirable traits in a population through selection. Quantitative traits are the most difficult to select for based on phenotypes due to low heritability and complex inheritance. Molecular markers which respond neutrally to genotype x environment interactions for disease reactions can be used to facilitate gene pyramiding for resistance using backcross breeding, especially when epistasis is present. Mapping of common markers among four common bean populations allowed us to correlate and co-orient the various linkage groups among these maps. Over 1000 RAPD and phenotypic markers have been mapped in common bean. Associations between markers and major genes, as well as QTLs for resistance to disease, have been identified. These genes were mapped either directly, based on segregation in mapping populations, or indirectly via molecular tags that segregated in other populations. Diseases for which associations between resistance genes and markers have been identified by us included bacterial diseases; common blight, brown spot, and halo blight, fungal diseases; web blight (WB), white mold (WM), and rust, and the viral disease bean common mosaic. In addition, QTLs for plant architecture and its relationships to WB and WM have been identified and mapped. The relative locations of these genes on the common bean integrated linkage map and the practical applications of these results on breeding and selections for one or more diseases will be discussed.

Dr. Jung is a candidate for the vegetable breeding position in Horticultural Sciences.

1998
 STATION CLUB
 BANQUET
 Friday,
 November 6



(above) Pat Marsella-Herrick, Plant Path, accepts the coveted "preferential parking" award as she is named Station Employee of the Year. A profile of Marsella-Herrick will appear in the December 4 issue of *Station News*. (left) Randy Worobo, Food Science & Technology, was a multiple winner (five!!) in Friday night's raffles.

CALENDAR of EVENTS

NOVEMBER 20-DECEMBER 4, 1998

EVENTS/MEETINGS

Friday, November 20, 6:30 pm

Belhurst Castle
Annual YMCA Dinner Dance

November 23, 8:00 am-1:00 pm

Sawdust Café
American Red Cross Blood Drive

Wednesday, December 2, 1:00-5:00 pm

Jordan Hall
Workshop on Intellectual Property Rights

December 2-3, 1998

Jordan Hall
Apple Research and Development Program
Board of Directors' meeting

Friday, December 4, 2:30-4:00 pm,

Staff Room, Jordan Hall
Geneva faculty meeting

SAVE the DATE

Saturday, January 23, 1999

Sunset Lanes
Station Club Bowling Party

LTC

- Class:** Mac Basics
- Date:** Wednesday, November 25, 1998
- Time:** 9:00-10:30 am
- Place:** LTC, Jordan Hall
- Class:** Mac Intermediate
- Date:** Wednesday, December 2, 1998
- Time:** 9:00-10:30 am
- Place:** LTC, Jordan Hall
- Class:** Meeting Maker
- Date:** Thursday, December 3, 1998
- Time:** 9:00-11:00 am
- Place:** LTC, Jordan Hall

DEADLINES

Friday, December 4

Select Benefits enrollment.
Contact Human Services (x210) for more information.

Monday, December 14

Proposals, progress reports, and summaries (summary should be e-mailed to kad2@nysaes.cornell.edu) for the Beet/Carrot Research Association are due in Director's Office.

SEMINARS

HORTICULTURAL SCIENCES

Date: Monday, November 23, 1998
Time: 11:00 am
Place: Staff Room, Jordan Hall
Speaker: Geunhwa Jung
Department of Horticulture
University of Wisc., Madison
Title: "Classical and Molecular Approaches to Breeding for Disease Resistance in Common Bean"
*Dr. Jung is a candidate for the vegetable breeding position in the Department of Horticultural Sciences, Geneva.
See seminar abstract, page 3.*

PLANT PATHOLOGY

Date: Tuesday, November 24, 1998
Time: 3:00 pm
Place: Room A133, Barton Laboratory
Speaker: Joy Bolar
Department of Plant Pathology
Cornell University, Geneva
Title: Chitinolytic Enzymes: A New Approach to Apple Scab Resistance

Date: Tuesday, December 1, 1998
Time: 3:00 pm
Place: Room A133, Barton Laboratory
Speaker: Brian Shaw
Department of Plant Pathology
Cornell University, Geneva
Title: Attachment, Germination and Appressorium Formation in *Conidia of Phyllosticta ampellicida*

CLASSIFIED

CAR FOR SALE: 1985 Toyota Tercel. 2 door hatch. Manual (5 spd). 98,000 miles. Reliable and will sell for \$900. Contact John Curtis on x453, or (home) 789 8972.

FOR RENT: Fully-furnished house for rent during sabbatical leave, February till July 1999. Four bedrooms, close to Station, schools, Colleges. Reasonable rate.

FUNDRAISER: Boy Scout Troop 58 is selling Dine-A-Mate books for \$20. You get 2-for-1 or 50% savings on fine, casual and informal dining, movies, museums, sports events, merchandise, local services, vacations, air fares and more, from now through 12/1/1999. Local establishments are Mario's, Pier House, Wine Garden, Lakeview, Pizza Hut, Denny's, Wing Tai, Alice's Kitchen, Geneva Cinema, Smith Opera House, Hobart Statesman, Seneca Lake Country Club, PK Putters, etc. Use it twice and you have recouped your investment plus supported a good cause. It also makes a great Christmas gift. For purchase or info. contact Jim at jpe6 (x378 or jpe6). Make checks payable to Troop 58.

ENTOMOLOGY

Date: Tuesday, November 24, 1998
Time: 10:30 am
Place: Room 310, Barton Laboratory
Speaker: Jan Nyrop
Department of Entomology
Cornell University, Geneva
Title: The Tortoise and the Hare Revisited: Mite Biocontrol in Perennial Systems
*Social interaction with the speaker at 10:00.
Coffee and cookies will be available.*

Date: Tuesday, December 1, 1998
Time: 10:30 am
Place: Room 310, Barton Laboratory
Speaker: Michael Villani
Department of Entomology
Cornell University, Geneva
Title: Evolution of Soil Arthropods
*Social interaction with the speaker at 10:00.
Coffee and cookies will be available.*

FST

Date: Wednesday, December 2, 1998
Time: 10:30 am
Place: FST Conference Room
Speaker: Malcolm Bourne
Dept. of Food Science & Tech.
Cornell University, Geneva
Title: How to Publish in Refereed Journals

CLASSIFIED

FOR SALE: Competitor 300 exercise/weight bench with adjustable slant, leg lift, and set of weights. Like new - \$60. Call Judy, X202.

THANKSGIVING DAY AEROBICS FUNDRAISER: The Geneva Family YMCA, 399 William St., is sponsoring fundraising aerobics on Thanksgiving Day, November 26. There will be two sessions: Hi-Lo at 9:00-10:00 am, taught by Arlene Eddington and Margaret Newland, and Step Combinations at 10:00-11:00 am, taught by Rita Bailey and Donna Roelofs. The cost for non-members and members is \$5.00 per person per class, proceeds to benefit the Center of Concern's "Operation Merry Christmas." Babysitting will be available (please call to arrange babysitting).

FOR SALE: Toyota Corolla, 1988, 4 door, auto, air, cass, 108k miles, good condition, \$3600 or best offer. Contact Kai-Shu Ling at x351, 781-7078 or email at k112.

MOVING SALE: Saturday-Sunday (Nov. 21-22), 9am-5pm, at 170 William Street (corner of William and Grove), Geneva, baby crib, furniture, household appliances, some free items. Every thing must go. Phone: 781-7078.